

KI-senterskisser

Skisser som grunnlag for søknader om forskningscentre for kunstig intelligens (KI-senter)

Forbehold:

Tekstene er slik de var da de ble sendt inn. Dvs. at navn på aktører og partnere ikke er kvalitetssikret og evt. uklarheter og skrivefeil i skissene er ikke rettet. Forfatterne av skissene har forholdt seg ulikt til malen. Flere har redigert i tabellene for å få med alle partnere og/eller presse inn nok informasjon. I konverteringsjobben kan det derfor forekomme rar formatering og i verste fall kan enkelte partnere ha falt ut. Dersom innsendere av skissen finner feil eller mangler i listen over partnere kan dere ta kontakt med KI-satsing@forskningsradet.no

INNHOLD

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354299: North Star Centre for Multi-modal AI:

354300: KINETIC - Knowledge-Informed and Energy-Efficient Artificial Intelligence for a Disruptive Green Transition:

354303: RILCARE-AI: AI Centre for Responsible Innovation in Primary and Emergency Care:

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354310: AI Centre for the Empowerment of Human Learning:

354311: Center for Applied AI in energy, health and education:

354312: The Tsetlin Machine Centre: Pioneering Green, Democratic, and Scientific AI for Transformative Innovation:

354314: Trustable Personalised Healthcare Solutions for Sustainable Innovations:

354315: AI Research Center for National Security:

- 354316: Sustainable AI for sustainable energy transition:
- 354317: BONXAI - Centre for Biologically Inspired General Purpose AI:
- 354318: NORBIT: Norwegian Center for AI-Driven Green and Blue Innovation and Transformations:
- 354319: HAVSMART - KI-senter for havdata:
- 354320: Centre for Explainable Artificial and Neural Intelligence:
- 354321: AI for NATURE: Levering and developing AI for measuring, monitoring and understanding of natural terrestrial ecosystems:
- 354322: Centre for knowledge-driven AI in complex Decision Processes:
- 354323: System Support for AI:
- 354324: Norwegian Center for Responsible Regional AI Innovation and Governance:
- 354326: Norwegian Centre on Generative AI:operational, explainable, sustainable:
- 354327: Centre for Artificial Intelligence in Healthcare (AI-HEALTH):
- 354328: Integrated AI-driven diagnostics for better healthcare:
- 354329: Norwegian Centre for the Unknown:
- 354330: AI-SPIRE: Research Centre for responsible approaches to the integration of AI technologies in the lives of children and young people.:
- 354331: Centre for Maritime AI Innovation:
- 354332: "KI-veg SVV", bruk av KI Statens vegvesen Skisse som grunnlag etablering av forskningscentre for kunstig intelligens (KI-senter):
- 354333: Centre for Energy Efficient AI Technology: From Matter to Machines:
- 354334: KI støttet Lærende Nettverk - Hvordan kan KI fasilitere for samskaping mellom ulike sektorer for bedre beslutnings- og innoverende prosesser:
- 354335: Artificial Intelligence Centre - Industrial AI (IndAI):
- 354336: Center for Human Development-focused Artificial Intelligence:
- 354337: KUNST Senter for KI i utdanning:
- 354338: Musculoskeletal & Orthopaedic Registry Evolution via AI (MORE-AI):
- 354339: MishMash - Senter for musikk og kunstig intelligens:
- 354341: Artificial Intelligence Centre for Humanities, Arts, Sciences and Education:
- 354342: Smarte medisinske laboratorier med KI:
- 354343: Collaborative human-artificial intelligence at the workplace:
- 354345: Cross-disciplinary AI-centre for Sustainable Biological and Environmental Research and Innovation:
- 354346: Center for AI-Driven Electricity Market Solutions (CAIEMS):
- 354347: "Bruk av Kunstig Intelligens for Optimalisering av Perioperativ Behandling: Et Nasjonalt Registerprosjekt":
- 354348: eXplainable AI for Multi-Scale:
- 354349: AI-biology interface: Harnessing the potential of combining Micro Physiological Systems and AI (MAI-Matrix):
- 354350: Norwegian Centre for Language Modeling:
- 354351: AIM-Health: National Centre for Artificial Intelligence in Medicine and Healthcare (Nasjonalt senter for KI i medisin og helse):
- 354352: Norwegian Center for Generative AI:
- 354353: AIDEAL - AI for the Energy and Ocean Economies:
- 354354: Skisse - Kunstig intelligens for saksbehandling:
- 354355: The Centre for Emerging Technologies in Public Service Delivery:
- 354356: Center for Ethical and Efficient Empowerment through Empathic AI:
- 354357: Centre on AI & Governance (CAIGE):
- 354358: Artificial intelligence for comprehensive healthcare (AI-CARE):
- 354359: Kunstig intelligens for geografisk informasjon:
- 354360: SUStainable cities by Human centered artificial Intelligence (SUSHI):
- 354361: AI for Business and Society:
- 354362: MISAKI - Leveraging and developing AI for holistic socioeconomic-environmental analysis and sustainability transition.:

- 354363: KIOS - Kunstig Intelligens i Offentlig Sektor:
- 354364: AI-driven diagnostic Assistant for Medical Applications:
- 354365: Norwegian Centre for Embodied AI:
- 354366: Centre for Neuromorphic Electronics:
- 354367: KI-RISK – senter for analyse og håndtering av samfunnsrisiko ved kunstig intelligens:
- 354368: Insight - New AI Methods for Innovative Use of Public Documents:
- 354369: SAIF– Centre for Sustainable AI Research Futures:
- 354370: Center for Quantum technology and Artificial Intelligence:
- 354371: AI Democratization for a Sustainable Future for All:
- 354372: Ocean AI center:
- 354373: Accelerated Information-Controlled Materials Development:
- 354374: PAIX - Peace and Artificial Intelligence centre of eXcellence:
- 354375: H-AITECH - Human-AI Teaming for Elevating Capabilities Hub:
- 354376: AI hub on Medical biotechnology:
- 354377: AMIVE: Autonomous Multi-agent based systems: challenges with Interoperability, Verification&validation and Explainability.:
- 354378: Cognitrix– Generic multi-sensor AI to enable better perception and interaction with the real world:
- 354379: EyeAI - Artificial Intelligence for Solving Inverse Imaging Problems:
- 354380: Artificial Intelligence Learning and Operationalization Resource centre:
- 354381: AI Center for Vaccines:
- 354382: Arete-senteret for kunnskap og innovasjon knyttet til KI i utdanningen.:
- 354383: Research Centre for Social Conditions, Consequences & Co-Creation of AI:
- 354387: Centre for automatic language analysis in psychotherapy research:
- 354388: Center for Sustainable Human-aligned AI at Scale:
- 354389: Reliable and responsible AI Solutions for Environmental challenges (RAISE-UP):
- 354390: AI Centre for Healthcare Foundation Modelling:
- 354391: Centre for AI-Based Societal Decision Support:
- 354392: AI ANTHROPOCENE - artificial intelligence for helping humans understand and act to limit the climate- and biodiversity crisis.:
- 354393: Fremskaffe kunnskap for å modernisere bygg-, anlegg- og eiendomsnæringen med utvikling og implementering av Kunstig intelligens:
- 354394: AI Center for Arctic Challenges (IArctic):
- 354396: Advancing Green Transition through digital transformation and AI-driven optimization:
- 354397: KI for bedre beslutningsstøtte i prehospitaltjenester og den utvidede akuttmedisinske kjede:
- 354398: KI for publikumsinnsikt (KIP):
- 354399: HAIX : A cross-disciplinary sustainable environment for harnessing AI and exascale data and computing:
- 354400: SkoleFlyt: A platform to facilitate studies on GenAI impact and use in education.:
- 354401: Center for research on human augmentation:
- 354402: Next Event Prediction by Multidisciplinary Agent Platforms:
- 354403: Centre for AI Ethics, Aesthetics and Creative Human Operations (CAIEAC):
- 354404: AI-based smart agriculture center:
- 354405: Centre for AI-Driven Molecular Solutions (AIMS):
- 354406: KI og tillit til dokumentasjon i offentlig forvaltning:
- 354407: Center for Compliance in the Application of AI Technologies:
- 354409: Scalable Natural Language Processing for Tracking Clinical Data and Improving Healthcare in Oncology (SCAN-ONC):
- 354411: Norwegian Centre for Artificial Intelligence Research:
- 354412: ANeED Research Centre for AI-driven cognitive augmentation, clinical decision support and human-AI interaction:

354413: Profesjonsutøving, dannning og tillit i det
21. århundret:

354140: KI-senter for persontilpassede psykiske helsetjenester (KI-PSYK):

Søkerorg: HELSE BERGEN HF

Ansvarlig org.: HELSE BERGEN HF

Kontaktperson: Tine Nordgreen, e-post: tine.nordgreen@helse-bergen.no

Sammendrag

KI-senteret for persontilpassede psykiske helsetjenester (KI-PSYK) vil bruke multiple, multimodale og multivariable datasett fra psykisk helse for å videreutvikle dagens KI-modeller, for å kunne tilby data@drevet persontilpasset behandling innen psykiske helsetjenester. Forskningssporene i senteret vil 1) utfordre og videreutvikle dagens KI-modeller innen helse, 2) undersøke relevans og kvalitet, 3) dokumentere intern og ekstern validitet og 4) integrere problemstillinger innen etikk, aksept og troverdighet. Forskningen ved senteret vil bidra til å flytte forskningsfronten nærmere generelt anvendbar kunstig intelligens. Forskningen i senteret vil også bidra til innovasjon og verdiskapning i helsetjenesten og helsenæringen.

Partnere og interessenter

OsloMet, Nasjonalt senter for e-helseforskning, Universitetet i Bergen, Youwell AS, Helse Førde, HF Helse Vest IKT, Simula

354142: Kompetansesenter for KI mot offentlige virksomheter:

Søkerorg: OSLO KOMMUNE OSLO ORIGO

Ansvarlig org.: OSLO KOMMUNE OSLO ORIGO

Kontaktperson: Sondre Engebråten, e-post: sondre.engebraten@origo.oslo.kommune.no

Sammendrag

Origo skal digitalisere og forbedre tjenester for Oslo kommunes innbyggere og ansatte gjennom brukerstyrt utvikling og ny teknologi. Vi ønsker å satse på kunstig intelligens (KI). Senteret vil omsette forskningsresultater til verdiskapende tjenester i offentlig sektor, f.eks. i helsesektoren, ved å bidra med ressurser og kompetanse innen tjenesteutvikling, personvern og KI-juss. Vi ønsker å etablere et muliggjørende team innen KI som vil hjelpe 13 produktteam i Origo å implementere KI-metoder. Dette vil bidra til mer effektiv offentlig forvaltning med høyere samfunnsnytte enn tidligere. Budsjettet over fem år er anslått til 21 millioner kroner, inkludert tekniske og juridiske årsverk for Origo sitt bidrag til senteret.

Partnere og interessenter

Oslo kommune

354145: Centre for AI Policy:

Søkerorg: Institutt for informatikk

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Truls Erikson, e-post: truls.erikson@sfe.uio.no

Sammendrag

The centre will provide new research into dynamic governance mechanisms that aim to shape Europe's digital landscape and facilitate a responsible and desirable AI future. The centre will provide policymakers and practitioners with a rigorous knowledge foundation on the implementation and consequences of policy interventions in this field, exploring the trade-offs and interactions that different policy approaches have, including the AI Act, how these may be coordinated and combined in appropriate manners, and how they affect AI responsibility, innovativeness, and competitiveness. Drawing on four leading research environments, and involving numerous key stakeholders, the centre seeks to facilitate robust state-of-the-art, transdisciplinary international research. This robust collaboration facilitates wide-reaching impact, and the potential for establishing a European barometer for AI competitiveness and responsible AI innovation.

Partnere og interessenter

Department of Informatics (IFI); Centre for Technology, Innovation and Culture (TIK), Saïd Business School and Institute for Ethics in AI, both at Oxford University.

354184: The AIQAI Centre: AI for Quantum for AI:

Søkerorg: SIMULA RESEARCH LABORATORY AS

Ansvarlig org.: SIMULA RESEARCH LABORATORY AS

Kontaktperson: Are Magnus Bruaset, e-post: arem@simula.no

Sammendrag

Artificial Intelligence (AI) demands extreme computational capacity, evidenced by the fact that data centres currently consume more energy than aviation globally. Quantum Computing (QC) is expected to deliver un- precedented computational power at a fraction of the energy classical supercomputers need. Adding the applicability of quantum computers for efficient optimisation of high-dimensional combinatorial problems, AI applications are ideal targets for QC-based approaches. Conversely, AI methods can significantly advance the field of QC, for instance, by simplifying quantum application development and mitigating problems currently limiting the scalability of quantum computers. The AIQAI Centre will integrate the dual facets of AI and QC, promoting R&D at the intersection of these cutting-edge technologies. The technological research will be complemented by research-based studies of the societal consequences of AI-QC, and the development of a comprehensive educational platform addressing needs ranging from university courses to increased quantum literacy in Norway. The AIQAI Centre intends to become Norway's launchpad into the QC era.

Partnere og interessenter

Oslo Metropolitan University, Cancer Registry of Norway, Tet Digital, Bineric, Kongsberg Discovery, Kvantify (DK), SemiQon (FI), ParityQC (AT), Okinawa Institute of Technology (JP), National Institute for Informatics (JP)

354209: Norway in Connected AI:

Søkerorg: UNIVERSITETET I SØRØST-NORGE

Ansvarlig org.: UNIVERSITETET I SØRØST-NORGE

Kontaktperson: Youcef Djenouri, e-post: youcef.djenouri@usn.no

Sammendrag

NorConAI (Norway in Connected AI) Center pioneers AI innovation via collaborative intelligence for societal advancement. With a focus on shared knowledge, it leads Norwegian entities in AI breakthroughs. Using cooperative frameworks, it explores data correlation complexity, driving innovation in sectors like education, metaverse of things, maritime, and farming. NorConAI also ensures ethical AI integration and safety measures, promoting responsible deployment. By amplifying collective intelligence, it catalyzes breakthroughs, forging national and global partnerships, setting a gold standard for AI governance while promoting the industrial sectors in Norway. NorConAI will cover three tracks: i) Social consequences of AI and other digital technologies: We will study the impact of share of learning experiences across several Norwegian entities while considering ethics and safety strategies. ii) Technology: We will develop AI systems that aims to study the different correlations among data and learning tasks. iii) Innovation: We will explore the outcomes of NorConAI in solving the current challenges of Norwegian industry by incorporating with leading Norwegian companies.

Partnere og interessenter

University of South-Eastern Norway, University of Oslo, Norwegian Research Center, OsloMet University, University of Stavanger, NMBU, SIKRI IsolaSolar, Kongsberg Maritime

354257: Norwegian Center for Artificial Intelligence Safety and Security:

Søkerorg: SIMULA RESEARCH LABORATORY AS

Ansvarlig org.: SIMULA RESEARCH LABORATORY AS

Kontaktperson: Olav Lysne, e-post: olav.lysne@simula.no

Sammendrag

This center will focus on the subfields of AI that have a direct impact on digital security and safety. On the one hand, development in these subfields of AI will sharpen the weapons of attackers, and present new safety challenges in digital engineering. Furthermore, the security of AI-models themselves present new challenges. On the other hand, AI tools will be developed and used to increase the security and safety of digital systems. To tackle these challenges we assemble the strongest research institutions in Norway from the area of AI, the area of digital security and safety, and from the relevant fields of social science. Research in the identified subfields of AI will form the core of the center, but researchers from all disciplines work in concert towards the stated common goal: To maximize the digital security and safety benefits given by AI, and limit its inherent risks.

Partnere og interessenter

Simula, SINTEF, NTNU, Universitetet i Oslo, Forsvarets Forskningsinstitutt, Universitetet i Stavanger, NTNU Samfunnsforskning AS, Telenor, Kongsberg, Nasjonal Sikkerhetsmyndighet, Datatilsynet, Norsk Helsenett, Mnemonic, Tietoevry

354265: KI-INDUSTRI- Artificial Intelligence for Regenerative Industry and Society:

Søkerorg: SINTEF AS

Ansvarlig org.: SINTEF AS

Kontaktperson: Ole Martin Løvvik, e-post: ole.martin.lovvik@sintef.no

Sammendrag

The KI-INDUSTRY centre aims to be a leading force in developing AI technology transferred to innovations for the Norwegian industry and beyond. The centre will research societal consequences of AI, addressing a broad spectrum of ethical, judicial, economic, and trust-related aspects. Development within new digital AI technologies will have seven focal points: cooperative AI, adaptive AI, trustworthy AI, green AI, embodied AI, human-centric AI, and quantum technology sensors. A hybrid multi-agent ecosystem will be built around the outcomes, creating a modular basis for exploitation within a wide range of applications throughout society. Industrial innovation tasks will involve use cases that define and benchmark the new AI tools, with a regenerative industry and society as the long-term target. The partners are from leading universities, research institutes, public sector, and industrial entities representing key segments of Norwegian society.

Partnere og interessenter

NTNU: Faculty of Natural Sciences, NMBU: Faculty of Science and Technology, UiA: Faculty of Engineering and Science, UiO: Faculty of Mathematics and Natural Sciences, USN: Faculty of Technology, Natural Sciences and Maritime Sciences, Fridtjof Nansen Institute (FNI), Institute for Energy Technology (IFE), Justervesenet, NORCE, Simula, SINTEF AS (SINTEF Community, SINTEF Digital, SINTEF Industry) and SINTEF Manufacturing AS, Clariant Norway Elkem ASA, Gilje Tre AS, Hydro ASA, Idletechs AS, Kongsberg Technology Cluster (KTC) Manufacturing Technology, Norwegian Catapult Centre (MTNC), Refacture AS Resitec AS SLB Norwa

354271: Digital Learning Communities Artificial Intelligence Centre (DLCAIC):

Søkerorg: UNIVERSITETET I BERGEN

Ansvarlig org.: UNIVERSITETET I BERGEN

Kontaktperson: Rune Johan Krumsvik, e-post: rune.krumsvik@uib.no

Sammendrag

Forskningsmiljøet bak denne søknaden har siden 2015 drevet KI-forskning og den overordnede målsettingen med senteret vil være å videreføre denne KI-forskningen innen læring, forskerutdanning og psykisk helse innen utdanning og helsesektoren. Senteret vil særlig være tematisk innrettet mot forskningsmetodisk innovasjon og anvendelse av kunstig intelligens (KI) innen helse og utdanning, samt hvordan KI-genererte innovasjoner og innovativ forskning på KI kan bidra inn mot omstillingen UH-sektoren står foran i de kommende årene. Senteret vil også adressere hvordan unge og voksnes digitale kompetanse kan medvirke til en bredere forståelse av sammenhengen mellom KI, sosiale medier og psykisk (u)helse, samt hvordan KI kan sementere eller bryte ned digitale skiller og digitalt utenforskap i befolkningen. Senteret vil være et nasjonalt tverrfaglig, tverrsektorielt og tverrinstitusjonelt forskningscenter og bidra til å styrke KI-forskningens samfunnskonsekvenser

Partnere og interessenter

UiB Det psykologiske fakultet, Det medisinske fakultet, ALREK Helseklynge, Helse Bergen1

354272: Center for Medical Artificial Intelligence:

Søkerorg: UNIVERSITETET I BERGEN

Ansvarlig org.: UNIVERSITETET I BERGEN

Kontaktperson: Helge Ræder, e-post: helge.rader@uib.no

Sammendrag

The Center for Medical Artificial Intelligence Bergen aims to improve healthcare and quality of life through AI. It focuses on both healthy individuals and patients, integrating AI in self-monitoring, diagnostics, personalized medicine, workflow optimization, and chronic disease management. The center collaborates with various institutions and health industry partners to leverage data from multiple sources, ensuring secure analysis and integration for enhanced healthcare services. Key research goals include enhancing diagnostic accuracy, developing personalized treatment plans, optimizing healthcare workflows, and ensuring ethical AI use. The center also emphasizes education and skills development, aiming to boost innovation and create new AI-driven healthcare solutions. With robust management, interdisciplinary collaboration, and a focus on scalability and privacy, the center strives to transform healthcare delivery and patient outcomes.

Partnere og interessenter

University of Bergen, Haukeland Universitetssykehus, Høgskolen på Vestlandet, Høgskolen Kristiania, Helse Vest IKT

354274: Interdisciplinary Centre for Research, Development, and Education in Foundation Models:

Søkerorg: SIMULA RESEARCH LABORATORY AS

Ansvarlig org.: SIMULA RESEARCH LABORATORY AS

Kontaktperson: Shaukat Ali, e-post: shaukat@simula.no

Sammendrag

We will establish a world-class center focusing on research and development of next-generation software built with foundation models that must be dependable, trustworthy, explainable, and ethical. We will empower industries of all sizes to build applications of different criticality levels, along with the public sector, scientists, and artists, by providing innovative methods and tools for cost-effectively developing applications using foundation models across various domains. We will also study the consequences of foundation models on their users' productivity and how such models can affect users from marginalized groups, thereby devising socially inclusive development with foundation models. Moreover, the center will build novel teaching methods and study how foundation models will impact the current education system and how such foundation models can be adapted to better meet the requirements and needs of current and future education. Finally, we will create a platform to connect Norwegian educational institutes, research organizations, the public sector, and companies to develop unified processes and methods to create and share foundation models

Partnere og interessenter

Simula Research Laboratory; UiO; Oslo Met ; UIT; Gjensidige; DNV ; Kahoot!; Proactima; Deichman; CICERO; Small Projects Gallery; Verdensteatret Cinematek and Tromsø International Film Festiva

354277: Senter for bærekraftig KI:

Søkerorg: Institutt for datateknologi og informatikk

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: John Krogstie, e-post: john.krogstie@ntnu.no

Sammendrag

Begrepet tvillingtransformasjon (twin transistion) understreker at vi må gjennomføre digitalisering og overgang til et mer bærekraftig samfunn på en koordinert måte. Bruk av KI er sentralt i digitaliseringen, og gir både muligheter for en mer bærekraftig utvikling, men har også store utfordringer langs alle dimensjoner av bærekraft. Det er mye fokus på miljømessig bærekraft, men dette må balanseres med sosial, individuell, økonomisk, deontisk og teknisk bærekraft når vi utvikler nye, innovative metoder, teknologier og løsninger for å støtte en bærekraftig digitalisering av samfunnet. Delprosjekter vil gå i dybden på de ulike dimensjonene. Som senter kan vi også se på alle disse dimensjonene i sammenheng, siden avveiningene som må gjøres i ulike systemer utgjør dilemmaer der ulike forhold i de ulike dimensjonene må balanseres. I tillegg kan vi studere spesifikke områder så som bærekraftig bruk av KI i helse, offentlig sektor og industriell virksomhet.

Partnere og interessenter

CESICT, goforIT, NAIL

354278: Centre for Physics-Guided AI in Life Sciences:

Søkerorg: SIMULA RESEARCH LABORATORY AS

Ansvarlig org.: SIMULA RESEARCH LABORATORY AS

Kontaktperson: Hermenegild Arevalo, e-post: hermenegild@simula.no

Sammendrag

The Centre for Physics-Guided AI in Life Sciences aims to enhance knowledge discovery in life sciences by developing AI methods guided by prior scientific knowledge and accurate models. Data sets from diverse sources are collected in life sciences, e.g., multi-omics, longitudinal data in systems biology, multimodal imaging and electrophysiological signals in neuroscience. While such data holds promise for scientific breakthroughs, state-of-the-art AI methods have limited capability in extracting insights and predictive learning. This centre will carry out ground-breaking research in machine learning, data science and scientific computing to develop explainable and physics-guided methods tailored towards exploring complex biological systems. The centre will be a hub for interdisciplinary research, state-of-the-art resources, and training programs. The centre will lead to discoveries, novel therapies and technologies with societal and economic benefits.

Partnere og interessenter

Simula Metropolitan Center for Digital Engineering (SimulaMet), SINTEF, Norwegian Center for Molecular Medicine (NCMM), K. G. Jebsen Center for Brain Fluid Research, NMBU, OUS Rikshospitalet Department of Cardiology, Center for Integrative Neuroplasticity (CINPLA)

354279: Senter for kunstig intelligens og etikk:

Søkerorg: MF VITENSKAPELIG HØYSKOLE

Ansvarlig org.: MF VITENSKAPELIG HØYSKOLE

Kontaktperson: Atle Ottesen Sjøvik, e-post: atle.o.sovik@mf.no

Sammendrag

Kunstig intelligens vil føre til store omveltninger i det norske samfunnet. Etiske problemstillinger knyttet til KI vokser med eksplosiv fart, og det er få i Norge som har ekspertise på feltet. Hovedmålet med senteret vil derfor være å bygge opp et forskningsmiljø med ekspertkompetanse på KI og etikk i Norge. Mange mekanismer i KI-teknologi truer den solidariteten som velferdsstaten forutsetter. Senterets overordnede forskningsfelt vil være hvordan kunstig intelligens bør integreres i det norske samfunn. Massive og nye etiske utfordringer krever langt dypere og mer helhetlig tilnærming enn det som finnes i dag: Etikk blir grunnleggende annerledes med KI fordi teknologien på en helt ny måte blir en autonom aktør å ta hensyn til i de etiske vurderingene. Digital teknologi gjennomsyrrer samfunnet og forandrer på grunnleggende vis hva sosiale interaksjoner er. Det trengs derfor solid og forskningsbasert kompetanse for å vurdere utvikling og bruk av KI på en etisk god måte.

Partnere og interessenter

MF vitenskapelig høyskole

354280: TRUST:

Søkerorg: Institutt for informatikk

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Morten Dæhlen, e-post: mortend@mn.uio.no

Sammendrag

TRUST is a mission-oriented research centre that focuses on trustworthy AI. The Centre's aim is to develop AI systems, and their surrounding governance ecosystems, that will be fair, efficient, safe, and sustainable for society. TRUST's research will be foundational, interdisciplinary, and multi-methodological. Contributing to all three tracks of the call, TRUST's research will be carried out by three broad research communities: machine learning (including statistics, mathematics, and informatics broadly defined); governance (including law, criminology, social science, and education); and philosophy (including ethics, epistemology, philosophy of language, political philosophy and aesthetics). In partnership with private and public users, leading AI research groups at UiO, NR, and Sintef and other Norwegian institutions, TRUST will create impact in multiple areas and sectors, enabling trustworthy AI innovation and governance

Partnere og interessenter

UiO, NR, Sintef

354281: Senter for samfunnskonskvenser av kunstig intelligens (SESAM):

Søkerorg: INSTITUTT FOR SAMFUNNSFORSKNING

Ansvarlig org.: INSTITUTT FOR SAMFUNNSFORSKNING

Kontaktperson: Kari Steen-Johnsen, e-post: ksj@samfunnsforskning.no

Sammendrag

SESAM aims to provide systematic knowledge about the societal consequences of artificial intelligence (AI) in core areas of Norwegian society: 1) democracy and politics, 2) governance and public administration, 3) working life and education, and 4) the civil sphere. Through close

collaboration between social scientists and computer scientists, SESAM will develop theories of how AI technology transforms the core principles of the Nordic societal model, and offer technological solutions that support ethical, fair, and transparent AI implementation. Together, these advances will push the international research front forward, providing insights applicable to other national contexts. The centre will respond to emerging knowledge needs of policymakers, industry, and civil society for the current and future socio-technical integration of AI. Overall, SESAM will elucidate how global, market-driven AI technologies can be aligned with the foundational values of the Nordic model, such as trust, equality, solidarity, and political, civil and social rights.

Partnere og interessenter

SimulaMet, Forsvarets forskningsinstitutt (FFI), Folkehelseinstituttet (FHI), UiB/Institutt for politikk og forvaltning, Datatilsynet, Direktoratet for forvaltning og økonomistyring (DFØ)/Kudos, KS, Likestillings- og Diskrimineringsombudet (LDO), LO, Nasjonalt ID-senter, Spekter, Claes de Vreese, AI, Media & Democracy Lab Malin Rönnblöm, Karlstad University Rachel Gibson, Uni Manchester Richard B. Freeman, Harvard University Kalle Moene, UiO

354283: Marine Analytics and Research Laboratories Network (MARLIN):

Søkerorg: HAVFORSKNINGSINSTITUTTET

Ansvarlig org.: HAVFORSKNINGSINSTITUTTET

Kontaktperson: Ketil Malde, e-post: ketil.malde@hi.no

Sammendrag

Senteret vil etablere og bygge opp varige og sterke KI-miljøer for marin forskning og forvaltning i samarbeid med ledende forskningsmiljøer innen KI og teknologi. Teknologi og anvendelse: Partnerne vil rekruttere og videreutvikle kompetanse som skal utvikle KI-løsninger og nye metoder med utgangspunkt i felles prosjekter og datagrunnlag for å effektivisere analyse, modellering, informasjonsuthenting, og beslutningsprosesser, samt koordinere samarbeid om infrastruktur, formidling, og datadeling. Innovasjon: Senteret vil videreutvikle samarbeid med industripartnere og internasjonale nettverk og etablere et internasjonalt kraftsentrum på marine KI-anvendelser. Samfunnskonsekvenser: Senteret skal løse konkrete utfordringer hos brukerpartnere, samt bygge opp KI-kompetanse, teknologi, og teori rettet mot autonome fartøy og beslutninger, modellering av komplekse systemer, prediksjon, og fremtidig teknologiutvikling og behov.

Partnere og interessenter

Havforskningsinstituttet, Kartverket, Norges geologiske undersøkelse, Forsvarets forskningsinstitutt, Norsk polarinstitutt, NORCE, Norsk senter for havrett UiT machine learning group

354292: Center for Public Sector AI/Senter for Offentlig Sektor KI (SOSKI):

Søkerorg: Institutt for IKT

Ansvarlig org.: UNIVERSITETET I AGDER

Kontaktperson: Morten Goodwin, e-post: morten.goodwin@uia.no

Sammendrag

The Center for Public Sector AI (SOSKI) is dedicated to accelerating Norway's public services into the future by incorporating state-of-the-art AI technologies. Through co-creation with the public sector, SOSKI will research AI, including natural language processing, machine vision, and logical reasoning in a secure and interpretable way to enhance service efficiency, accessibility, and decision-making across critical areas such as education, healthcare, public health, map services, and environmental management. Our primary objectives are to research tailored and cross-disciplinary AI solutions to the needs of the public sector, foster innovative AI applications, increase collaboration on technology, and position Norway as a global leader in public sector AI over the next five years. SOSKI also aims to address the societal, economic, and ethical facets of AI deployment.

Partnere og interessenter

University of Agder Academic/research: Østfold University College (HiOF), Norwegian Institute of Bioeconomy Research (NIBIO), Western Norway Research Institute (WNRI), NILU, Simula Economics Norway (Samfunnsøkonomisk Analyze AS), Sørlandet Hospital Trust, Norwegian Mapping Authority (Kartverket). Application/use Norwegian Institute of Public Health (FHI) Norkart, Infuture, KS digitale fellestjenester, Kristiansand Municipality, Digi Agder with municipalities in Agder, Agde Fylkeskommune, and Sparebanken Sør.

354293: Center for GeoAI-Powered Environmental Digital Twins:

Søkerorg: Institutt for informatikk

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Einar Broch Johnsen, e-post: einarj@ifi.uio.no

Sammendrag

AI has a tremendous potential for predicting behavior and proposing strategies based on advanced, data-driven models, but it is often challenging to put these models to operational use. Our aim is to enable the operational use of AI in contexts that depend on the complex dynamics of natural environments. We tackle this problem by fostering a symbiosis between GeoAI and environmental digital twins, i.e., spatio-temporal predictions and digital twins of natural environments. We combine the ability of digital twins to analyze hypothetical “what-if” scenarios with the ability of AI to make predictions based on complex data. The center integrates highly interdisciplinary teams of leading experts with “living labs” for technology development and evaluation, based in complementary application areas with a strong synergy potential. A common denominator for these application areas is their dependence on the dynamics of natural environments that are affected by climate stressors, and their need for predictions over time, space and environmental conditions.

Partnere og interessenter

University of Oslo, Norwegian Meteorological Institute, Kartverket, Simula, Sintef, Statkraft

354295: Research Centre for AI Application in Ocean Industries:

Søkerorg: Institutt for maskin- og marinfag

Ansvarlig org.: HØGSKULEN PÅ VESTLANDET

Kontaktperson: Margareta Lützhöft, e-post: mhl@hvl.no

Sammendrag

The research centre aims to foster efficient and sustainable development and integration of AI in ocean industries. It will enable AI technologies with concrete applications in ocean industries, facilitate safe adoption of Maritime Human-Centred AI technologies by the maritime workforce and others who work in ocean industries and strengthen the capacity of innovation systems in ocean industries to absorb AI technologies and use these technologies to accelerate the green transition. Moreover, the centre will study the social, environmental, and economic consequences of AI technologies. The centre will be multidisciplinary in nature and consist of researchers with a diverse background - including engineering, maritime studies, economics, and innovation studies. Combined, the research conducted by the centre will contribute to Norwegian ocean industries maintaining their leadership status in innovation and sustainability in the digital age.

Partnere og interessenter

HVL, Norce

354296: AI, Democracy, and the Public Sector:

Søkerorg: NTNU DET HUMANISTISKE FAKULTET

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: May Thorseth, e-post: may.thorseth@ntnu.no

Sammendrag

The proposed 'Centre on AI, democracy, and the public sector' convenes experts in AI, ethics, and society to research the development, implementation, and ethical and social aspects of AI within Norway's public sector. Our research is structured along the three cross-cutting themes 'just technology development,' 'democratic governance,' and 'ethics' integrating real-world case studies across public sectors (education, health, media, defense, and social/welfare). Our short-term goal is a robust humanities and social science-based AI center catalyzing, improving and synergizing research on the topic at national level. Our long-term aim is ensuring that increased use of AI in the public sector benefits Norwegian society, and occurs in a just, democratic and ethical manner. To this end, we seek to foster transdisciplinary collaboration with public sector actors and companies and connect insights from social sciences and humanities with natural science and technical competencies.

Partnere og interessenter

Department of Philosophy and Religious Studies, Center for Technology & Society, Department of Art and Media Studies; Department of Sociology and Political Science; Department of Computer Science; Faculty of Medicine and Health Sciences: Department of Public Health and Nursing; NTNU Samfunnsforsk

354297: DAI-2030:

Søkerorg: NORCE NORWEGIAN RESEARCH CENTRE AS

Ansvarlig org.: NORCE NORWEGIAN RESEARCH CENTRE AS

Kontaktperson: Randi Valestrand, e-post: rava@norceresearch.no

Sammendrag

Norway currently hosts one of the world's foremost research communities on data assimilation (DA), the AI-adjacent discipline of optimally combining simulation models (digital twins) and observational data for improved predictions and decisions. DAI-2030 aims to formalise this conglomeration into a world-leading research centre merging DA with AI and especially machine learning (ML) techniques. The theoretical union will strengthen DA in its established applications of weather, climate, oceanography, glaciology, and geological reservoirs. The centre will also yield gains in data-rich domains or where there are shortcomings in the process or physical models, notably renewable energy systems, medical diagnostics, and precision agriculture. Vice-versa the facility of DA to provide uncertainty quantification (UQ) will be applied to AI techniques where it is lacking

Partnere og interessenter

Norce

354299: North Star Centre for Multi-modal AI:

Søkerorg: Institutt for fysikk og teknologi

Ansvarlig org.: UNIVERSITETET I TROMSØ - NORGES ARKTISKE UNIVERSITET

Kontaktperson: Robert Jenssen & Kerstin Bach, e-post: robert.jenssen@uit.no; kerstin.bach@ntnu.no

Sammendrag

The North Star Centre for Multi-modal AI (North Star AI) represents a shift in AI research towards integrity AI as a world-leading centre in the emerging field of multi-modal AI. Towards this end, we jointly leverage data from multiple sources and sensors over time and space for new innovations and value. We research responsible use of data, risks, responsibility and auditability hand in hand with development of circular and more sustainable AI being informed by numerical models and processes. We control generative simulations to not hallucinate and to generalize better. We integrate resilience, reasoning, and develop novel explainable methods for safe and trustworthy AI. North Star AI creates new solutions for marine and maritime applications, for nature use and conservation, and for the well-being of people, within the private and public sectors. The centre joins domains and complementary competences creating a major hub for frontier AI research, recruitment, education, and innovation.

Partnere og interessenter

UiT, NTNU, NORCE, Norwegian Computing Center

354300: KINETIC- Knowledge-Informed and Energy-Efficient Artificial Intelligence for a Disruptive Green Transition:

Søkerorg: NTNU FAKULTET FOR INGENIØRVITENSKAP

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Are Strandlie, e-post: are.strandlie@ntnu.no

Sammendrag

The centre will be a hub for research and development of knowledge-informed, energy-efficient and application-oriented AI algorithms across a variety of engineering domains. It will integrate deep physical knowledge with data-driven methodology to minimize the required energy consumption and

cost needed to solve advanced computational engineering tasks, contributing to the sustainable green transition in industry and society. The knowledge developed in collaboration with national and international partners will through use cases be disseminated to the industrial partners, contributing to leveraged research capacity on applied AI in Norwegian industry and public sector. The centre will also contribute to the creation of new knowledge on sustainable and applied AI through candidates educated at all levels of our engineering study programs, constituting our most significant footprint in the future society.

Partnere og interessenter

PoreLab (Norwegian Center of Excellence), ETH Zürich, CERN, SINTEF Ocean, Equinor, Norsk Hydro, Kongsberg Technology Cluster, NCE Manufacturing, NVE, Statens Vegvesen

354303: RILCARE-AI: AI Centre for Responsible Innovation in Primary and Emergency Care:

Søkerorg: NORCE Teknologi/Energi VESTLAND

Ansvarlig org.: NORCE NORWEGIAN RESEARCH CENTRE AS

Kontaktperson: Klaus Johannsen, e-post: kljo@norceresearch.no

Sammendrag

The AI-Centre will ensure sustained realization of AI promises on transforming primary and emergency care, improving health economic, quality care, and healthcare equality in Norway. It will leverage AI capabilities and address key aspects of AI deployment, including acceptability, interoperability, and cost-efficiency. Main research tracks include operational AI, intelligent interoperability, economic of AI, reinforced self-assessment, biases in AI, human-machine interaction, and AI safety and security. Cross-disciplinary experts will pilot use cases to minimize administrative burdens, decrease sick leave, and improve service quality. The Centre will set new standards in AI deployment, and creating scalable, self-improving AI applications. Short-term impacts will demonstrate patient care improvements, while long-term impacts will transform healthcare delivery, improve clinical outcomes, reduce disparities, and improve overall health and wellbeing of the Norwegian society.

Partnere og interessenter

Norce, Haukeland Univ. sykehus, NTNU, UiB, UiS, DNV

354304: Center for Beneficial AI:

Søkerorg: NTNU DET HUMANISTISKE FAKULTET

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Roger Andre Søråa, e-post: roger.soraa@ntnu.no

Sammendrag

The Center for Beneficial AI (BAI) will be key to fair, just and sustainable implementation of AI in the public sector. By mobilizing a sociotechnical approach that combines Social Sciences & Humanities and Computer Science, BAI will radically enhance Norway's AI readiness, develop interdisciplinary knowledge about AI's impact on society and support AI innovation in the public sector. Underlining the center's work are 3 GUIDING PRINCIPLES that operationalize beneficial AI as (1) diverse; (2) sustainable, and (3) responsible. These guiding principles will inform research, networking, and

innovation through 3 RESEARCH AREAS: 1) AI enhancement of public datasets and practices; 2) Upskilling public servants' AI knowledge; and 3) roadmaps and technical solutions for improved citizen-AI interactions. Through empirically rich, bottom-up approaches, interdisciplinary research involving Natural Language Processing (NLP), Case-Based Reasoning (CBR), and multimodal generative AI, the center will ensure that wide implementation of AI in Norway is beneficial to all.

Partnere og interessenter

NTNU (Faculties of Humanities, Faculty of Information Technology and Electrical Engineering, Brussels office) Trondheim municipality Western Norway Research Institute Ålesund municipality Bern University of Applied Sciences in Switzerland (BFH) Sunnfjord municipality University of California, Santa Cruz (UCSC) Democracy X in Denmark

354305: Child Development and Safety in the Age of AI:

Søkerorg: OSLOMET - STORBYUNIVERSITETET

Ansvarlig org.: OSLOMET - STORBYUNIVERSITETET

Kontaktperson: Gunn Astrid Baugerud, e-post: gunnba@oslomet.no

Sammendrag

Children's lives are increasingly influenced by AI technologies, making it essential to understand and guide AI's impact on their cognitive, emotional, and social development. We propose a dedicated research center to explore AI's interactions with children, conducting interdisciplinary research in learning, child well-being, ethics, digital risks, and digital safety. The center will address current challenges and opportunities, developing AI tools and educational programs. Combining expertise from AI, psychology, education, law, sociology, media studies, and political science, the center will promote ethical AI integration, involve children in designing AI technologies, and ensure timely research to mitigate risks and maximize benefits. Technical advancements will include adaptive algorithms, multimodal data processing, and explainable AI, creating safe and effective AI systems that enhance children's empowerment in the digital age.

Partnere og interessenter

Oslo Metropolitan University, Simula Metropolitan Center for Digital Engineering; Norwegian Computing Center; University of Oslo; University of Bergen

354308: AI in Work, Organisations, Knowledge Society:

Søkerorg: SINTEF DIGITAL

Ansvarlig org.: SINTEF AS

Kontaktperson: Hans Torvatn, e-post: hans.torvatn@sintef.no

Sammendrag

AI-WORKS will promote a culture of sustainable, responsible, and manageable Generative AI in knowledge work organizations and society as a whole, by conducting cutting-edge research on the interactions between technology-organisation-people, considering risks and ethical and regulatory needs, and establishing structures for relevant competence development. The centre will capitalize on existing interdisciplinarity of the partners' expertise to put into perspective the rapidly developed knowledge in this field, and will organise thematic areas to holistically address the challenges and disruptions that Generative AI introduces at workplaces and society. The aim, as a long-term impact,

is to facilitate responsible and sustainable Generative AI-driven transformation in organisations to safely navigate towards the integration of next generation of Generative AI technologies in work.

Partnere og interessenter

SINTEF Digital & SINTEF Nord Simula & SimulaMet NTNU UiO Høgskolen i Østfold FAFO NAV Politiet Storebrand Tietoevry Knowit Lerøy Havfisk Nergård Havfiske

354309: Safe Industrial Knowledge-based AI:

Søkerorg: SINTEF AS

Ansvarlig org.: SINTEF AS

Kontaktperson: Signe Riemer-Sørensen, e-post: signe.riemer-sorensen@sintef.no

Sammendrag

Despite being crucial for the green transition, most Norwegian industry actors struggle to extract the full potential of artificial intelligence (AI) and machine learning (ML) methods in their daily operations. The main objective of SIKAI, Safe Industrial Knowledge-based AI, is to enable Norwegian industry to develop and deploy data-centric and knowledge-based AI for safe, secure, and trustworthy decision support in industrial contexts and demonstrate applications and value creation across multiple sectors. SIKAI is committed to advancing high-quality research that enhances industry efficiency, minimizes resource use, and fosters sustainability for a greener future.

Partnere og interessenter

SINTEF NTNU, Department of Engineering Cybernetics Kongsberg DNV AkerBP Hydro AS Vianode Elkem Borregaard Cybernetica Glitre In dialogue with Equinor AS

354310: AI Centre for the Empowerment of Human Learning:

Søkerorg: Centre for the Science of Learning and Technology

Ansvarlig org.: UNIVERSITETET I BERGEN

Kontaktperson: Barbara Jane Wasson, e-post: barbara.wasson@uib.no

Sammendrag

AI-LEARN takes an interdisciplinary approach to address the opportunities, challenges, and risks associated with the use of AI for the empowerment of human learning. The recent access to AI powered tools is transforming the way humans learn and work and has had a profound and far-reaching impact on educational institutions, workplaces, and society. To unleash AI's full potential ethically and responsibly for learning, work, and digital citizenry, it is crucial to approach its development and use with caution and critically evaluate its strengths, limitations, and impact by considering technical, practical, pedagogical, ethical, and regulatory and legal challenges. AI-LEARN draws on foundational & applied research and innovation with a diversity of stakeholders to lay the foundations for responsible, trustworthy, and sustainable AI solutions for the empowerment of human learning in diverse contexts.

Partnere og interessenter

UiB, Faculty of Law) NTNU (LCI lab, IE Faculty (co-leader), Department of Teacher Education, Section for teaching, learning and digital services) Private and public sector: Sikt, VISMA, KS, Digital Norway, UDE Oslo Kommune, Abelia, European EdTech Alliance

354311: Center for Applied AI in energy, health and education:

Søkerorg: UNIVERSITETET I STAVANGER

Ansvarlig org.: UNIVERSITETET I STAVANGER

Kontaktperson: Tom Ryen, e-post: tom.ryen@uis.no

Sammendrag

Our Center of Applied AI will focus on application-based AI research to solve real world problems in three tracks: education, health and energy. The center will have the support and participation from partners with domain knowledge from industry, hospitals, and municipalities. The center will have a holistic approach to real world problems: research connected to leveraging real world data, development of robust, secure, environmental-friendly and legally compliant AI algorithms and generation of real world evidence of the impact of the solutions. To generate real world evidence, the center will focus on the consequences and impact of the developed AI technology from the user and society perspective, including regulation and legislation. Cross-disciplinary research will be a trademark of the center, including the transfer of knowledge between the different application disciplines.

Partnere og interessenter

Helse Stavanger HF, Høgskolen på Vestlandet, Høgskolen i Østfold, Høgskolen Kristiania, NORCE, Norwegian Center for e-health, Simula Research Laboratory, SINTEF, Sykehuset i Vestfold HF, Vestlandsforskning, Amazon AWS, Equinor, Factive, Indykite, Lyse AS, Laerdal Medical AS, NORA.ai, Nordic Edge, Norwegian AI Cloud, Oceaneering, Smart Care Cluster, Smedvig ASA, SpareBank 1 SR Bank, Stavanger kommune, Sandnes kommune, Strand kommune, Syngens AS, Validé, Å Energi

354312: The Tsetlin Machine Centre: Pioneering Green, Democratic, and Scientific AI for Transformative Innovation:

Søkerorg: Institutt for IKT

Ansvarlig org.: UNIVERSITETET I AGDER

Kontaktperson: Ole-Christoffer Granmo, e-post: ole.granmo@uia.no

Sammendrag

The Tsetlin Machine Centre (TMC) will drive a paradigm shift in AI by advancing and industrializing Tsetlin machines, a human-understandable ultralow-energy (10 000x) alternative to deep learning, with unrivaled inference speed (1000x). TMC will create 1) a green self-sustaining low-cost ultralow-power ecosystem for all-pervasive AI, from nano- and microscale edge devices to high-end supercomputing; 2) scientific knowledge-creating Tsetlin machines that replace the brittle correlations of today's machine learning with clearcut cause-and-effect, mimicking the logical and causal reasoning innate to humans; enabling 3) democratic AI for all, ensuring fairness, truthfulness, non-discrimination, privacy, and accountability from the ground up. Three waves of cross-sectoral transformation span peacekeeping, crime-fighting, health, energy, safety, environment, and finance, manifested as hardware-software pipelines that accelerate a new world-leading Norwegian industry.

Partnere og interessenter

UiA, UiO, NMBU, PRIO, KRIPOS, Telenor, Kongsberg, NORCE, SINTEF, DNV, Å Energi, Havtil, PIT, PHS, NILU, Imperial College London, University of Pittsburgh, Newcastle University, NTNU, University of Southampton, IISc, UPMC, SSHF, NKOM, Norwegian Public Roads Administration, Glitre Nett

354314: Trustable Personalised Healthcare Solutions for Sustainable Innovations:

Søkerorg: OSLO UNIVERSITETSSYKEHUS HF

Ansvarlig org.: OSLO UNIVERSITETSSYKEHUS HF

Kontaktperson: Ilangko Balasingham, e-post: ilangko.balasingham@ous-research.no

Sammendrag

The current artificial intelligence (AI) tools in healthcare primarily focus on specific, straightforward tasks such as segmentation and detection in a single modality. They fall short when handling complex tasks like diagnosis, treatment planning, delivery, outcome predictions, and patient follow-up using multidimensional and multimodal data. To tackle these challenging issues, our Centre brings together AI researchers, clinicians, social scientists, and industry professionals in a transdisciplinary approach. Our goal is to develop, test, and validate next-generation AI methods that aspire to match human intelligence cost-effectively and sustainably, ultimately benefiting patients and society. Our efforts will also result in educating a new generation of clinicians with AI expertise and enhancing AI health literacy among patients and users.

Partnere og interessenter

University of Oslo, Norwegian Business School BI, NTNU, St. Olav Hospital, Oslo Kommune, Gjerdrum Kommune, Norsk Regnesentral, Simula Research Lab, SINTEF. DIPS, DNV, Ledidi, Kreftregister, Sykehuspartner, Norway Health Tech, Landsforening for hjerte og lunge, Kreftforeningen, NORA, KIN, NorwAI. International: Harvard Uni., Stanford Uni., Royal Institute of Technology (KTH), Karolinska Institute, Moffitt Cancer Center, NVIDIA, Medtronic, Siemens Healthineers

354315: AI Research Center for National Security:

Søkerorg: UNIVERSITETET I SØRØST-NORGE

Ansvarlig org.: UNIVERSITETET I SØRØST-NORGE

Kontaktperson: Olaf Graven, e-post: Olaf.Hallan.Graven@usn.no

Sammendrag

The AI-SeC centre will utilise digital technologies to advance national safety and security, leading to substantial improvements in interoperability, situational awareness, data-driven defence and resilience mechanisms. National security includes societal and environmental safety, industrial production and energy security, safe transportation and autonomy, health and food security as well as military readiness with quantum-enhanced data processing, and cyber-security. The centre will strengthen the collaboration among national and international research organisations, various sectors and other actors including those with stringent safety requirements, high-tech companies, and public entities as partners. We aim to develop trustworthy user-oriented AI solutions based on synergies and technology transfer possibilities to other fields of application. The centre will be open

to new participants, and will excel on bridging research, innovation, and commercialisation across sectors and sciences.

Partnere og interessenter

Adapa360 AS, Avinor, COBS Monitoring, DNV Imatis AS, Business Oulu Fin, Cloud Fin, we Havguard, Hovedredningsentralen, Kartverket, Kongsberg Automotive, Kongsberg brann og redning, Kongsberg Defence & Aerospace, Kongsberg Næringsforum, Kongsberg Technology Cluster, Kongsbergregionen, Livv Health, Norges Geotekniske Institutt, Norges geologiske undersøkelse, NITO Competence Centre, Norsk institutt for vannforskning, Norse Asset Solutions AS, Norsk Romsenter, Optime Subsea AS, Oslo Universitetssykehus, Pale Blue, RINVE-nettverket, SINTEF SentiSystems AS, SINTEF Digital, Six Robotics AS, Stressman Engineering AS, T-Kartor Norway AS, TechnipFMC, Vestlandsforskning VR, Oslo Business Cluster

354316: Sustainable AI for sustainable energy transition:

Søkerorg: SINTEF ENERGI AS

Ansvarlig org.: SINTEF ENERGI AS

Kontaktperson: Christian André Andresen, e-post: Christian.Andresen@sintef.no

Sammendrag

SustAI skal flytte forskningsfronten i bruk av kunstig intelligens (KI) og andre digitale teknologier for å løse utfordringer knyttet til bærekraft. SustAI vil også sette søkelys på bærekraftigheten til selve teknologien. Klimakrisen, naturkrisen, energikrisen og utfordringer rundt sosial bærekraft må løses på en helhetlig måte. Senteret vil utforske mulighetene for den mest markedseffektive løsningen for dette. En rekke muliggjørende teknologier vil bli videreutviklet og anvendt på nevnte utfordringer. I flere sektorer (energi, bygg, transport) eksisterer det veletablerte fundamentalmodeller, og senteret vil utforske hvordan KI kan kombineres med disse og hvilke muligheter som ligger der. Senteret vil utforske bærekraftig bruk av KI med energieffektive datasenter og algoritmer som er bærekraftig både i et teknologisk perspektiv opp mot natur og klima, men også i et sosialt perspektiv som ivaretar personvern og tilrettelegger for en rettferdig energitransisjon.

Partnere og interessenter

Sintef energi

354317: BONXAI- Centre for Biologically Inspired General Purpose AI:

Søkerorg: FAKULTET FOR KJEMI, BIOTEKNOLOGI OG MATVITENSKAP

Ansvarlig org.: NORGES MILJØ- OG BIOVITENSKAPELIGE UNIVERSITET (NMBU)

Kontaktperson: Solve Sæbø, e-post: solve.sabo@nmbu.no

Sammendrag

BONXAI will focus on developing new methods for AI that are intrinsically more robust, ethical, and sustainable than contemporary AI. Growing international interest for general purpose intelligence and energy efficiency establish a shift towards radically new and more bio-inspired approaches as paramount. Norway has an excellent strategic opportunity to take a lead role and make important impact by exploiting strong research environments in neuroscience, identifying biological mechanisms for causal reasoning, efficient and low-cost learning, multimodal information integration, attention, and autonomy. The knowledge obtained in the centre will be integrated in

complete edge intelligence systems and practical use-cases will be explored. BONXAI is grounded in fundamental research, where research on AI technologies and impact of such technologies to society are seamlessly integrated in a transdisciplinary manner.

Partnere og interessenter

NMBU, HiØ, Simula, UiA, UiO, UiB, NTNU, OsloMet, SINTEF, KRUS, NordicSemiconductor

354318: NORBIT: Norwegian Center for AI-Driven Green and Blue Innovation and Transformations:

Søkerorg: UNIVERSITETET I TROMSØ - NORGES ARKTISKE UNIVERSITET

Ansvarlig org.: UNIVERSITETET I TROMSØ - NORGES ARKTISKE UNIVERSITET

Kontaktperson: Tamer Abu-Alam, e-post: tamer.abu-alam@uit.no

Sammendrag

NORBIT aims to accelerate green transformation beyond the narrow focus on CO2 emissions & energy transition, including environmental objectives in line with the EU taxonomy such as protecting & restoring biodiversity, reducing pollution, and sustainably using resources. Leveraging advanced AI, NORBIT develops future-proof solutions for attaining environmental objectives across aquaculture & fisheries, agriculture & land use, and maritime sectors. Implementing an integrated AI data platform to analyze environmental, social, and economic impacts, NORBIT fosters interdisciplinary collaboration, integrating scientific, social, policy & legal perspectives. The centre builds capacity through recruitment, training, and mobility, drawing on the successful CloudEARTH network to unite diverse partners across sectors. This consortium invests world-class expertise into AI-driven sustainability solutions, positioning Norway to spearhead sustainability analytics for the UN's Sustainable Development Goals (SDGs).

Partnere og interessenter

Akvaplan-niva (national – research partner) Nofima - The Norwegian Institute of Food, Fisheries and Aquaculture Research (national - research partner) NINA - Norsk institutt for naturforskning (national - research partner) Norinova (national – business/innovation partner) SINTEF Ocean (national - research partner) Octa Insight AS (national - business partner) Nanpow AS (national - business partner) The Bayes Centre, Edinburgh University (international - research partner) Edinburgh Innovation (international - business/innovation partner) University of Applied Sciences of Burgenland (international - research partner) Technical University of Varna (international - research partner) Kyiv Academic University (international - research partner) Istanbul Kültür University (international - research partner) EIT Climate-KIC (Pan-European Institute) FASTTrack (international - business/innovation partner) The University of Tasmania (international – research partner - member of UArctic)

354319: HAVSMART- KI-senter for havdata:

Søkerorg: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Eirik Sivertsen, e-post: eirik.s.sivertsen@ntnu.no

Sammendrag

Ved å utvikle og bruke avansert KI på havdata skal HAVSMART bidra til å styrke Norges posisjon som en av de ledende nasjoner på havforskning, og bidra til et nytt paradigme for havdata, havforskning og havforvaltning. Et nytt paradigme må ha mer data av bedre kvalitet, til en lavere kostnad og lavere miljøavtrykk. Norge har store mengder komplekse havdata og omfanget øker hver dag.

Kombinasjonen av heterogene datasett og ny KI-teknologi er en ideell kombinasjon, som vil gi ny innsikt i sammenhenger om havet og nye gevinster. Det overordnede målet for senteret er hvordan vi skal sikre effektiv og bærekraftig trening og vedlikehold av KI-modeller basert på ekstreme mengder sanntidsdata av ulik oppløsning og kvalitet. Våre løsninger vil være overførbare til mange andre sektorer nettopp fordi vi angriper helt fundamentale utfordringer i KI.

Partnere og interessenter

NTNU SINTEF Ocean Havforskningsinstituttet NGU Meteorologisk institutt Kartverket

354320: Centre for Explainable Artificial and Neural Intelligence:

Søkerorg: Institutt for matematiske fag

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Benjamin Adric Dunn, e-post: benjamin.dunn@ntnu.no

Sammendrag

The Centre for X*AI aims to improve AI in science, health, and industry by enhancing human understanding, decision-making autonomy, and oversight. Central to our mission is the demystification of AI processes, and empowerment of researchers, professionals, and society. We will develop methods that explain AI results for strategic planning while dissecting mechanisms of artificial and biological networks for technical insights and enhancements. By creating transparent methods for advanced AI models and refining them for critical applications and technical readiness, we will improve and inform the next generations of AI. The Centre will lead in developing and adopting AI in sectors where Norway excels, such as health, brain science, energy and innovation, and position itself as a leader in advancing responsible AI for a better society

Partnere og interessenter

Dept. of Computer Science (IDI), NTNU; iiKavli Inst. for System Neuroscience (KISN), NTNU; iiiDept. of Psychology (IPS), NTNU; ivDept. of Mathematical Sciences (IMF), NTNU; v School of Comp. & Info. Syst., U. Melbourne, Australia; viCenter for Neural Science, NYU, USA; viiBrain Mind Institute & NeuroX, EPFL, Switzerland; viiiDept. of Psychiatry, UCSD, USA; ixDept. of Psychology, Clinical Psychology and Psychotherapy, UH, Germany

354321: AI for NATURE: Levering and developing AI for measuring, monitoring and understanding of natural terrestrial ecosystems:

Søkerorg: NIBIO - NORSK INSTITUTT FOR BIOØKONOMI

Ansvarlig org.: NIBIO - NORSK INSTITUTT FOR BIOØKONOMI

Kontaktperson: Rasmus Astrup, e-post: rasmus.astrup@nibio.no

Sammendrag

The role of AI for NATURE will be to position Norwegian AI research at the international research frontier with respect to using AI for management support and protection of natural terrestrial ecosystems. AI for NATURE will leverage and develop an ecosystem of AI agents for measuring, monitoring, and understanding of natural terrestrial ecosystems to support their sustainable development. Further, AI for NATURE will function as a catalyst for innovation in the use of AI in private and public sector through implementation the developed solutions for sustainable management and protection of natural terrestrial ecosystems.

Partnere og interessenter

NIBIO NMBU Naturhistorisk museum (UiO) ETH Zurich University of Cambridge Oracle Cloud Infrastructure Norway Field Group Statskog Glommen-Mjøsen Skog Viken Skog AT Skog

354322: Centre for knowledge-driven AI in complex Decision

Processes:

Søkerorg: Institutt for teknisk kybernetikk

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Sebastien Gros, e-post: sebastien.gros@ntnu.no

Sammendrag

AID gathers an excellent interdisciplinary team of researchers and user partners that will collaborate to develop novel AI methods to be used in complex decision processes, which can act optimally and safely in uncertain environments, by modelling or handling risks explicitly. The research consists of: 1) Development of groundbreaking AI methods, via interdisciplinary theoretical and methodological developments on knowledge-driven and risk-aware AI for decision making, including computational aspects, light embedded algorithms, distributed methods, and uncertainty quantification; 2) Innovations carried out through broad and interdisciplinary case studies in close collaboration with over 30 stakeholders in AI, energy, health, and transportation; and 3) Investigation of societal consequences and industrial impacts of the research. The stakeholders will provide data, case studies, and ensure fast innovation and value creation.

Partnere og interessenter

NTNU (IE, IV, ØK, TSO Energy, TSO Health, Kavli Institute for Systems Neuroscience, NAIL center) SINTEF (Energy, Digital, Industry, Community) Simula Smart Innovation Norway Transportøkonomisk institutt

354323: System Support for AI:

Søkerorg: SIMULA METROPOLITAN CENTER FOR DIGITAL ENGINEERING AS

Ansvarlig org.: SIMULA METROPOLITAN CENTER FOR DIGITAL ENGINEERING AS

Kontaktperson: Pål Halvorsen, e-post: paalh@simula.no

Sammendrag

The rapid advancements in artificial intelligence (AI) applications raise the necessity for lower-level robust and efficient underlying system support. This project aims to research the impact and challenges of supporting almost any type of AI application across diverse sectors using real-world

problems from health, bio- and nano-technology, elite sports, finance, and fraud detection. We will investigate generic AI-infrastructure platforms agnostic to application domains targeting efficient resource consumption, sustainability, security, compliance, and generic system support for generalizability and explainability. The proposal seeks to develop generic solutions that can enhance the trust and practicality of AI applications. Our approach includes interdisciplinary experts from computer science, law, healthcare, sports, and complex data-savvy problem owners. This proposal includes national and international policymakers, end-users and industrial movers in the AI application and system infrastructure domain.

Partnere og interessenter

SimulaMet/Simula (several departments), UiT (CS & Law), OsloMet (CS), UiO (CS & Med), UiB (CA & Law), INN (CS & Biotech), UiA (CS), NTNU (CS) System/equipment: Microsoft, nVidia, Dolphin, Telenor, Augere Medical, Oslo Uni. Sykehus, Forzasys, Olympiatoppen, Sahlgrenska Uni. Sykehus

354324: Norwegian Center for Responsible Regional AI Innovation and Governance:

Søkerorg: NORDLANDSFORSKNING AS

Ansvarlig org.: NORDLANDSFORSKNING AS

Kontaktperson: Brigt Dale, e-post: brigt.dale@nforsk.no

Sammendrag

NordregAI will be a leading hub for cutting-edge research in the field of AI to address regional social challenges and innovation opportunities, particularly in peripheral regions. The centre will use co-creation and social labs to promote understanding and development of responsible, resilient AI solutions to challenges related to socioeconomic, socioecological, and socio-ethical issues around health and welfare, labour markets and tourism, energy and infrastructure, preparedness, food and agriculture, democracy and education. Results from this work will provide necessary guidance for aligning governance, industry initiatives, and further research and development at various levels around AI with societal and political ambitions including service delivery, human rights, democracy, privacy and security, and social equality.

Partnere og interessenter

Nordland Research Institute SINTEF Nord University Rana Utvikling

354326: Norwegian Centre on Generative AI: operational, explainable, sustainable:

Søkerorg: NORCE Teknologi/Energi AGDER

Ansvarlig org.: NORCE NORWEGIAN RESEARCH CENTRE AS

Kontaktperson: Ahmed Nabil Belbachir, e-post: nabe@norceresearch.no

Sammendrag

The ambition is to create a strong, coherent and effective AI centre in Norway that establishes novel foundations in generative AI for boosting the economy and competitiveness. AI is at the core of the technological race across the world for resilience and sovereignty due to current geopolitical crises and conflicts. Norway needs to reinforce its position in AI for improving its technological leadership

while keeping up its societal welfare. The groundbreaking path of this centre is to tackle current AI models limitations in dealing with the physical world such as robots and machines with a new paradigm that enables AI-powered robots to operate trustfully and reliably. The innovation path is to exploit the current domain knowledge and market access of Norway to enable uptake and leadership and create business opportunities with new inventions in AI. Norway with most vibrant technology landscape in AI will better be positioned to attract skilled professionals and retain local talent.

Partnere og interessenter

University of Stavanger (UiS) (Chunming Rong) University of Bergen (UiB) (Antonella Zanna) University of Agder (UiA) (Arne Wiklund) University of Tromsø (UiT) (Filippo Bianchi) Norwegian University of Science and Technology (NTNU) (Ilias Pappas) University of Oslo (UiO) (Marianne Fyhn) University of South-East Norway (USN) (Youcef Djenouri) Western Norway University of Applied Sciences (HVL) (Reza Arghandeh) SIMULA (Arnaud Gotlieb) SINTEF Digital (Till Christopher Lech) User partner: DIH Oceanopolis User partner: Fiskher User partner: Aker BP User partner: Equinor User partner: SLB User partner: Halliburton User partner: Mechatronics Innovation Lab (MIL)

354327: Centre for Artificial Intelligence in Healthcare (AI-HEALTH):

Søkerorg: OSLO UNIVERSITETSSYKEHUS HF

Ansvarlig org.: OSLO UNIVERSITETSSYKEHUS HF

Kontaktperson: Ole A. Andreassen, e-post: ole.andreassen@medisin.uio.no

Sammendrag

Artificial intelligence (AI) has a transformative potential for healthcare. We aim to unleash the dormant potential of AI thanks to the unique opportunities in Norway with nationwide health data in registries and biobanks, real-world data from hospitals and municipalities, and eHealth solutions. We will develop novel AI-tools to leverage the massive unexplored training data from registries and biobanks and thus integrate multimodal data from clinical care, applying novel federated learning tools. Our AI approach will transform hospital clinics into data learning hubs with constant testing and validation of multimodal models across medical disciplines, unlocking large synergy and transdisciplinary added value. We will start with targeted use cases and expand to hospital-wide solutions. We will work closely with pharma and med tech industries to translate the findings into innovative medical products, with large potential for business development and reducing healthcare costs, across all health regions of Norway.

Partnere og interessenter

OuS, University of Oslo, AHUS, Diakonhjemmet, St Olav, UNN/UIT), Norwegian Institute of Public Health (NIPH), Norwegian Business School (BI), Oslo kommune, Bærum kommune, Stavanger kommune, Orkla kommune, Sykehuspartner, Helsedirektoratet, Norwegian AI Research Consortium (NORA UiO), Norwegian Computing Centre (NR)

354328: Integrated AI-driven diagnostics for better healthcare:

Søkerorg: HELSE BERGEN HF

Ansvarlig org.: HELSE BERGEN HF

Kontaktperson: Sabine Leh, e-post: sabine.leh@helse-bergen.no

Sammendrag

Never before has so much and such vastly diverse health data been available offering unprecedented opportunities to redefine healthcare. At the same time, there are two major challenges: (1) This data is largely stored and analysed in silos and each medical discipline, now fully digital, has typically developed its own standards and analysed data in isolation without cross-disciplinary integration. (2) The sheer volume of data overwhelms both health care providers and patients. This deluge of data not only submerges the medical field in excess information but also drowns out potential insights. The primary mission of this AI research centre is to revolutionize healthcare by integrating diverse medical data sources through artificial intelligence and close inter-disciplinary cooperation for a holistic approach to diagnostics.

Partnere og interessenter

PiV, MMIV, Renal Research Group, UiB, SpecBase

354329: Norwegian Centre for the Unknown:

Søkerorg: OSLOMET - STORBYUNIVERSITETET

Ansvarlig org.: OSLOMET - STORBYUNIVERSITETET

Kontaktperson: Gustavo Borges Moreno e Mello, e-post: gustavom@oslomet.no

Sammendrag

Wicked Problems (WiPs) such as climate crisis and sustainable urban development are complex social issues that lack straightforward definitions of cause or solutions. The Norwegian Centre for the Unknown (NCU) aims to push the boundaries of AI while developing interdisciplinary collaborative strategies to provide resolutions to WiPs. NCU's activities will focus on three priorities: (a) Create novel AI paradigms to tackle complexity and causality by emphasizing cooperation, curiosity, and creativity in AI; (b) Study the impact of AI by experimenting with new forms of incorporating it into society and institutions; (c) Empower citizens, industry, and policymakers to better navigate the world's complexity, striving towards a sustainable democratic welfare society.

Partnere og interessenter

OsloMet, USN, OUS, HIOF, Simula, UiT, Kristiania University College, UiO, DNV, Menon Economics, Ruter, TETs, NMBU, NORCE Norwegian Research Centre AS, Bearing point

354330: AI-SPIRE: Research Centre for responsible approaches to the integration of AI technologies in the lives of children and young people.:

Søkerorg: Institutt for medier og kommunikasjon

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Elisabeth Staksrud, e-post: elisabeth.staksrud@media.uio.no

Sammendrag

The goal of AI-SPIRE is to enhance understanding of and develop responsible approaches to the integration of AI technologies in the lives of children and young people. The centre will examine the positive and negative effects of innovations in AI technologies on children's development, learning, social interactions, and privacy. AI-SPIRE will improve existing knowledge about the social and

cultural consequences of innovations in artificial intelligence for children and young people's lives, provide updated theoretical conceptualisations of online risks and opportunities, and pioneer new methodologies for understanding and navigating the novel landscape of AI-driven digital environments and services. Our research will equip stakeholders with the nuanced insights necessary to craft responsible, child-centric approaches to AI integration, ensuring that the digital futures of children are shaped with their welfare and rights as a central concern.

Partnere og interessenter

Senter for Barn, unge og medier v/Institutt for medier og kommunikasjon Universitetet i Oslo (UiO), Universitetet i Sørøst-Norge (USN), Handelshøyskolen v/Prof. Eiri Elvestad , Universitetet i Agder (UiA),

354331: Centre for Maritime AI Innovation:

Søkerorg: SINTEF OCEAN AS

Ansvarlig org.: SINTEF OCEAN AS

Kontaktperson: Svein Peder Berge, e-post: svein.berge@sintef.no

Sammendrag

Vision: Hybrid AI for greener, safer and more efficient maritime operations Goal: Development of hybrid AI for improved decision support for ship designers and operators, allowing optimization of energy-efficiency, safety and cost The centre aims to address the gaps of classical modelling techniques and solutions for maritime applications. This will be achieved by merging domain knowledge with operational data and AI to develop novel modelling techniques that advance the current state-of-the-art. Research will focus on supporting various maritime decision support systems, where the topics of data management, hybrid modelling, human-centric AI as well as safe and reliable AI will be central. By merging Norway's world leading competence in maritime technology with state-of-the art AI techniques, the centre aims to shape the future of the maritime industry.

Partnere og interessenter

SINTEF Ocean SINTEF Digital SINTEF Ålesund NTNU DNV Kongsberg Maritime

354332: "KI-veg SVV", bruk av KI Statens vegvesen Skisse som grunnlag etablering av forskningscentre for kunstig intelligens (KI-senter):

Søkerorg: STATENS VEGVESEN

Ansvarlig org.: STATENS VEGVESEN

Kontaktperson: Anders Godal Holt, e-post: anders-godal.holt@vegvesen.no

Sammendrag

Statens vegvesen, SVV, sender inn skisse med intensjon å signalisere interesse for deltakelse i anslagsvis 1-3 senter. Vi ønsker i utgangspunktet å gå bredt ut i vår interesse og er åpne for å følge alle tre sporene som det er lagt opp til at KI-sentrene skal dekke: Samfunnskonsekvenser av KI og annen digital teknologi Teknologi: utvikling av fremtidens digitale teknologier, med hovedvekt på kunstig intelligens Innovasjon: Hvordan ta i bruk KI og digitale teknologier Hovedmålet med

deltakelse i sentre vil for SVV være å utvikle kunnskap og teknologi om KI, inkludert generativ KI, som styrker offentlig virksomheter i håndteringen av komplekse sammenhenger knyttet til infrastruktur som er kritisk for samfunnets behov for fremkommelighet, sikkerhet og beredskap. Aktivitet SVV involveres i forventes å ha stor overføringsverdi til andre deler av offentlig sektor.

Partnere og interessenter

Statens vegvesen

354333: Centre for Energy Efficient AI Technology: From Matter to Machines:

Søkerorg: Institutt for datateknologi og informatikk

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Gunnar Tufte, e-post: gunnar.tufte@ntnu.no

Sammendrag

The centre initiative's focus and goal is to create and facilitate for AI hardware capable of meeting the contemporary and further challenge of providing AI hardware and AI methodology that are sustainable and capable of providing the computational power needed for a society embracing AI at all levels. To meet the energy and sustainability challenge AI hardware must become extremely much more energy friendly. The AI centre will address this technology challenge on a time-scale ranging from novel improvement of contemporary computer architecture, processing elements and system level software within the silicon digital paradigm. At the intermediate time scale the technology focus is on new computing paradigms as neuromorphic computing, brain-like architectures and neural network accelerators in silicon. At the future emerging technology scale, radical new technology beyond silicon and the "ruling" Turing-von Neumann computing paradigme are targeted.

Partnere og interessenter

Department of Computer Science NTNU, Department of Electronic Systems UiO, Department of Informatics Norwegian silicon industry Industry

354334: KI støttet Lærende Nettverk- Hvordan kan KI fasilitere for samskaping mellom ulike sektorer for bedre beslutnings- og innoverende prosesser:

Søkerorg: LEARNLAB AS

Ansvarlig org.: LEARNLAB AS

Kontaktperson: Stig-Erik Steimler, e-post: stigerik@learnlab.net

Sammendrag

Samfunnet står ovenfor en rekke «wicked problems» som er skapt av mennesker og påvirker mennesker, globalt og lokalt. Senteret skal utforske hvordan KI-støttede «kontinuerlig lærende nettverk» kan fremme bærekraftig innovasjon, kompetanseheving og beslutningstaking på tvers av sektorer. Vi ønsker å utvikle og forske på hvordan ulike entiteter kan komme sammen og samarbeide basert på kompetanse og behov, og se på hvilke effekter KI kan ha i slike prosesser. Hvordan kan KI koble samarbeidspartnere, hvordan kan deltakere bygge opp en lokal kunnskapsbank for KIen, som igjen bistår i samskapende prosesser hvor beslutninger som tas oppdaterer kunnskapsbasen. På

denne måten kan samarbeid ha en direkte og indirekte kompetansehevende effekt. Hvilke samfunnsmessige fordeler kan dette ha, hvordan skal den digitale infrastrukturen se ut og hvordan kan en slik måte å jobbe på bidra til bærekraftig innovasjon?

Partnere og interessenter

Learnlab AS

354335: Artificial Intelligence Centre- Industrial AI (IndAI):

Søkerorg: Institutt for datateknologi og informatikk

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Jon Atle Gulla, e-post: jon.atle.gulla@ntnu.no

Sammendrag

While technologically fascinating AI innovations abound, compelling, working solutions routinely employed in everyday industrial settings are few and far apart. It is only with realistic levels of uptake in everyday use that social consequences of AI materialize. The principal ambition of IndAI is to enable fast, efficient and safe uptake of AI through mapping out the needs and social consequences of AI in real-world, industrial settings, in tandem with continued technological development and innovations. To realize its ambition, IndAI capitalizes on two key resources. Combining (i) the SFI NorwAI and NAIL's comprehensive repertoire of AI methods technologies with (ii) the vibrant ecosystem of industrial partners in process industry, engineering and construction, energy and media, makes IndAI uniquely positioned to address the simultaneously scientifically and publicly pressing concern of social consequences of AI.

Partnere og interessenter

NTNU

354336: Center for Human Development-focused Artificial Intelligence:

Søkerorg: UNIVERSITETET I SØRØST-NORGE

Ansvarlig org.: UNIVERSITETET I SØRØST-NORGE

Kontaktperson: Elin Kjelle, e-post: elin.kjelle@usn.no

Sammendrag

The Center for Human Development-focused AI (HUMAIN) will advance the use of AI in health and welfare services to improve the quality of life for all. For this purpose, HUMAIN will answer the urgent need for capacity, skills, and knowledge to choose, implement, evaluate, and support a human-centric use of AI in health and welfare services, covering the tracks of innovation and societal consequences of AI. HUMAIN will promote the responsible and sustainable use of AI and work closely with all stakeholders by creating an inclusive and citizen-science-friendly national arena for innovation. HUMAIN will help develop guidelines for implementing human-centric AI in health and welfare. HUMAIN will explore ethical, safe, and sustainable ways of data sharing and synergies between health and welfare and other sectors, such as energy and defense. HUMAIN will enhance AI competence through education and training, ensuring that the implementation and use of AI promote human development.

Partnere og interessenter

USN, UiO, UiA, Norwegian Center for E-health Research (NSE), Vestre Viken Hospital Trust (VVHF), South-Eastern Norway Regional Health Authority (HSØ), NAV Vest Viken og Vestfold og Telemark, Drammen municipality, DIPS AS, Sopra Steria, Migrants' Citizen Science Association (MCSA)

354337: KUNST Senter for KI i utdanning:

Søkerorg: HØGSKULEN PÅ VESTLANDET

Ansvarlig org.: HØGSKULEN PÅ VESTLANDET

Kontaktperson: Gro Vatne Røslund, e-post: gvro@hvl.no

Sammendrag

KUNST er et forskningssenter som utforsker hvordan barn, unge og voksne kan lære om og bruke KI på en ansvarlig og nyskapende måte. Forskningen dekker barnehage, skole, høyere utdanning (HU), og etter- og videreutdanning (EVU), med et mål om å integrere forskningsbasert anvendelse av KI i hele utdanningsløpet, og forberede individer for arbeidslivet og til å bli godt opplyste samfunnsborgere. Forskningen vil skape nye kunnskaper om hvordan tradisjonell undervisning, veiledning og evaluering kan videreutvikles ved bruk av KI. Tverrfaglig og tverrsektorielt samarbeid er etablert. Sammen med partnere med toppkompetanse innen KI i utdanning og rekruttering av forskere vil senteret flytte forskningsfronten hva angår bruk av KI i utdanning og livslang læring. KUNST har en tredelt tilnærming: 1) kartlegging og respons med pedagogiske innovasjoner, 2) planlegging og utvikling av relevant KI-teknologi og 3) forutse utdannings- og samfunnskonskvenser.

Partnere og interessenter

Høgskolen på Vestlandet, UiT Norges arktiske universitet, Universitat Politècnica de València, Vives University of Applied Sciences, KU Leuven, OsloMet, Nasjonalt senter for e-helseforskning, Oslo universitetssykehus, d-teach

354338: Musculoskeletal & Orthopaedic Registry Evolution via AI (MORE-AI):

Søkerorg: HELSE BERGEN HF

Ansvarlig org.: HELSE BERGEN HF

Kontaktperson: Eivind Inderhaug, e-post: eivind.inderhaug@gmail.com

Sammendrag

Musculoskeletal disorders represent a leading cause of medical visits in Norway, necessitating improvements in prevention, diagnosis, and management. This proposal aims to establish an AI Center within Norway's national musculoskeletal registries, leveraging AI to enhance data collection, management, and analysis. This center will automate data capture from electronic medical records using natural language processing, integrate radiological imaging, and create a patient-directed interface. By expanding data elements and streamlining collection, the initiative seeks to improve patient outcomes through real-time feedback and evidence-based recommendations. Enhanced data quality will fuel research and revolutionize treatment strategies, advancing musculoskeletal care globally. This initiative promises to reduce the burden on surgeons and patients, optimize healthcare delivery, and set new standards for medical registry administration.

Partnere og interessenter

Helse Bergen HF

354339: MishMash- Senter for musikk og kunstig intelligens:

Søkerorg: Institutt for musikkvitenskap

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Alexander Refsum Jensenius, e-post: a.r.jensenius@imv.uio.no

Sammendrag

MishMash vil være en nasjonal, tverrfaglig, kreativ møteplass for utvikling, uttesting og refleksjon innen musikk og kunstig intelligens (KI). Målet er å forstå mer om menneske–maskin-interaksjon gjennom et av de meste komplekse menneskelige fenomene som finnes: musikk. Senteret dekker alle de tre tematiske områdene i utlysningen: (1) utvikling av ny KI-teknologi med fokus på kroppslig kognitive modeller, multimodalitet, emosjoner og multiagent systemer; (2) innovativ utforskning av KI-systemer i både skaping og formidling av musikk og i musikalsk distribusjon, lisensiering og regulering; (3) forskning på samfunnskonsekvenser med fokus på etiske problemstillinger, mangfold, helse og velferd. MishMash vil være et virtuelt senter, organisert i en hub–node-modell, som samler verdensledende forskere i tett samspill med relevante offentlige institusjoner, bransjeorganisasjoner, det frie musikkfeltet og relevante næringslivsaktører.

Partnere og interessenter

UiO, UiA, BI, HiOF, HVL, INN, Kristiania, NLA, NMH, NTNU, UiB, UiT, NRK, NB, NOTAM, BEK, TEKS, Popsenteret, Kunstsilo, Ultima

354341: Artificial Intelligence Centre for Humanities, Arts, Sciences and Education:

Søkerorg: HØGSKOLEN I INNLANDET

Ansvarlig org.: HØGSKOLEN I INNLANDET

Kontaktperson: Ida Marie Sofie Helland Jahr, e-post: ida.jahr@inn.no

Sammendrag

Research on the development, application and social consequences of artificial intelligence and machine learning (AI/ML) is conducted in many academic disciplines from various perspectives and with competing interests. The INN AI CHASE centre will be an interdisciplinary centre where scholars from the natural sciences, social sciences, fine arts, cultural industries, humanities, and education will come together to share competencies, ideas and perspectives, and where this interdisciplinarity is a main vehicle for promoting competence and for exploring the societal implications and consequences of AI/ML. The centre will create a shared database as a repository for approaches and methods for digital implementation. It will also provide a physical space and mechanisms for dissemination, and a conceptual dimension for cooperation and exchange of ideas and perspectives to contribute to understanding and safe, effective and ethical development and application of AI/ML.

Partnere og interessenter

INN University, UiO, AHO, NTNU, USN, NILU

354342: Smarte medisinske laboratorier med KI:

Søkerorg: HELSE BERGEN HF

Ansvarlig org.: HELSE BERGEN HF

Kontaktperson: Ralf Kellmann, e-post: ralf.kellmann@helse-bergen.no

Sammendrag

Prosjekter i denne skissen planlegges å inngå i et senter for KI. Det jobbes langs flere akser som er relevant for forskning og tjenester ved Laboratorieklinikken. Målsetningen er å utvikle bedre, KI-baserte verktøy for overvåking og kvalitetssikring av avanserte biokjemiske analyser, bedre identifikasjon og bekreftelse av ukjente substanser for rusmiddelanalyse og av fysiologisk viktige molekyler i forskning på metabolske sykdom. Det arbeides med maskinlæring på resultater fra rutineanalyser, forskningsanalyser fra biobanker og helsedata for forbedret differensialdiagnostikk som unngår invasive og kostbare spesialdiagnostiske prosedyrer og for mer treffsikre prognoser for persontilpasset behandling. Mye av aktivitetene utføres ved manuell databehandling. Automatisering gjennom digitalisering med algoritmer som er mer treffsikre vil gi gevinster ved å fjerne feilkilder, effektivisere arbeidsflyt, og raskere og tryggere diagnostikk og forskning.

Partnere og interessenter

Helse Bergen, Helse Vest IKT, UiB

354343: Collaborative human-artificial intelligence at the workplace:

Søkerorg: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Halvor Holtskog, e-post: halvor.holtskog@ntnu.no

Sammendrag

Coll-In will be an AI-centre dedicated to collaborative human-artificial intelligence at workplaces. We will investigate how AI-enhanced Socio-Technical Systems(STS) should be created, constantly improved, nourished, and innovated to be as effective, efficient, intuitive, comprehensive, and robust as possible, and how AI can aid this. How can we use AI to boost learning (human as well as machine learning) create novel knowledge, and aid learning and decision-making on strategic, operational, and on-the-job levels. Be fair, accountable, trustworthy, resilient, safe, secure, and ethical? We postulate that human competence is even more important for organisations' productivity and competitiveness with the introduction of advanced AI technology, but human roles, tasks, and interactions (with humans and technology) are changing and evolving driven by the pace of technology evolution. Coll-in will be cross-sectorial and multi-disciplinary developing into a cross-disciplinary centre creating novel combined knowledge.

Partnere og interessenter

SINTEF Manufacturing, MTNC, NCE Manufacturing, SFI NORCICS, SFI Manufacturing, INRESCOS, IDT Solutions, ProSIT, Sopera Steria, Sykehuset Innlandet, Eyde network, Kongsberg Defence & Aerospace, Agder University, AIST and Waseda University (Japan), IIT (India), Fraunhofer and Uni Stuttgart (Germany), UCT and IIT Jules Verne (France), GWU and UMich (USA)

354345: Cross-disciplinary AI-centre for Sustainable Biological and Environmental Research and Innovation:

Søkerorg: NORGES MILJØ- OG BIOVITENSKAPELIGE UNIVERSITET (NMBU)

Ansvarlig org.: NORGES MILJØ- OG BIOVITENSKAPELIGE UNIVERSITET (NMBU)

Kontaktperson: Ulf Geir Indahl, e-post: ulf.indahl@nmbu.no

Sammendrag

Environmental and biological sciences address critical interdisciplinary questions related to climate, sustainable resource management, and food production. AI tools trained on high-quality sensor data will soon characterize leading research and tech-solutions in these fields. The CAISBERI centre will be dedicated to developing effective AI tools and methodology to tackle sustainability and resource management challenges, bringing together scientific expertise in bioproduction and environmental research. NMBU and its partners have a long tradition in the bioproduction-related disciplines, but we face knowledge gaps in utilizing increasing data volumes from various sensor technologies. While some innovators are making progress, expertise remains fragmented. CAISBERI aims to fuse bioproduction and technology expertise into an interdisciplinary environment for research collaboration, knowledge development, and problem-solving with innovative and energy efficient AI and robotics.

Partnere og interessenter

NMBU, Universitetet i Agder, NIBIO, Adigo AS, CageEye AS, Robotics and Automation, Wageningen University

354346: Center for AI-Driven Electricity Market Solutions (CAIEMS):

Søkerorg: INSTITUTT FOR ENERGITEKNIKK

Ansvarlig org.: INSTITUTT FOR ENERGITEKNIKK

Kontaktperson: Murat Tutkun, e-post: murat.tutkun@ife.no

Sammendrag

The Center for AI-Driven Electricity Market Solutions (CAIEMS) aims to leverage advanced AI to tackle critical challenges in the electricity market. By enhancing power production forecasts, optimizing maintenance scheduling, integrating diverse energy sources, improving cybersecurity, and assessing socio-economic impacts, CAIEMS will promote efficient, reliable, and sustainable energy management. As a leading research hub, CAIEMS will conduct pioneering research, foster interdisciplinary collaborations, and drive innovation. CAIEMS will significantly contribute to the electricity market, benefiting society and the economy by improving grid stability, reducing costs, and promoting sustainability. Immediate impacts include deploying AI solutions, enhancing grid efficiency, and increasing cybersecurity, with long-term benefits such as widespread AI adoption, policy influence, environmental improvements, and economic growth.

Partnere og interessenter

IFE

354347: "Bruk av Kunstig Intelligens for Optimalisering av Perioperativ Behandling: Et Nasjonalt Registerprosjekt":

Søkerorg: HELSE BERGEN HF

Ansvarlig org.: HELSE BERGEN HF

Kontaktperson: Torbjørn Nedrebø, e-post: neto@ihelse.net

Sammendrag

Dette prosjektet søker å forbedre perioperativ behandling i Norge ved å integrere kunstig intelligens (AI) med et perioperativt register. Ved å analysere data fra perioperativt register og dødsårsaksregisteret, skal vi identifisere risikofaktorer, optimalisere ressursbruk og forbedre kliniske utfall. Prosjektet inkluderer også pasientrapporterte utfallsmål (PROM og PREM) for å måle pasientens opplevelse og livskvalitet etter kirurgi.

Partnere og interessenter

Helse Bergen

354348: eXplainable AI for Multi-Scale:

Søkerorg: Institutt for fysikk

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Astrid Silvia de Wijn, e-post: astrid.dewijn@ntnu.no

Sammendrag

The Centre for eXplainable AI for Multi-Scale (X-AIMS) aims to advance explainable artificial intelligence (XAI) technologies with multi-scale applications in complex systems, and especially in materials science. The Principal Investigators (PIs) possess strong backgrounds in computer science and computational science having extensive experience in machine learning as well as their own specific application areas. Leveraging this expertise, we are dedicated to enhancing the transparency and interpretability of AI systems across various domains. Our primary research goals focus on developing and applying XAI methods that offer clear, understandable, and actionable insights at multiple scales – from individual data points to large, complex systems. X-AIMS's expertise, combined with the Centre's collaborative and innovative environment, will drive significant advancements in the fields related to complex systems, leading to impactful applications across various sectors, from industrial to societal endeavors.

Partnere og interessenter

NTNU, SINTEF, Software for Chemistry & Materials; Nanolayers Research Computing, Elkem, Wacker, Kongsberg Maritime, Morrow Batteries, ArcticZymes, Fieldmade, Statens Vegvesen

354349: AI-biology interface: Harnessing the potential of combining Micro Physiological Systems and AI (MAI-Matrix):

Søkerorg: UNIVERSITETET I OSLO

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Stefan Krauss, e-post: stefan.krauss@medisin.uio.no

Sammendrag

The pioneering MAI-Matrix project aims to develop an interdisciplinary Centre/network that works towards harnessing the potential of combining Micro Physiological Systems (MPS) and Artificial Intelligence (AI) to create next generation Clinical Decision Support Systems (MAI-CDSS), AI guided tissue engineering by supervised morphogenesis (AIM), AI guided tissue homeostasis (Alage), and humanized IT systems (HIT). By integrating advanced AI algorithms with MPS data, the project seeks to develop predictive personalized digital twins, enhance disease modeling and treatment responses, and drive innovations in tissue and organ engineering. Additionally, AI will facilitate real-time monitoring and maintenance of tissue homeostasis, and pioneer neural organoid-computer interfaces, leading to breakthroughs in personalized medicine, bioengineered transplants, and next-generation bioinspired computing systems.

Partnere og interessenter

UiO, OUS, Simula, UiB

354350: Norwegian Centre for Language Modeling:

Søkerorg: Institutt for informatikk

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Lilja Øvrelid, e-post: liljao@ifi.uio.no

Sammendrag

NCLM will conduct foundational research on large language models (LLMs). The center will address research questions that are fundamental to both the development and deployment of LLMs, with a strong emphasis on opportunities and challenges in the Norwegian context, i.e. particularities of the languages of Norway, Norwegian culture, and societal values. With partners spanning both academia and the public sector, including the four "BOTT" universities, the center represents a broad national alliance. It gathers top-tier specialized competencies across the fields of natural language processing, machine learning, high performance computing, digital data management, educational sciences, linguistics, social sciences, philosophy, and law. NCLM will create an empirical basis for LLM R&D in Norway, conduct basic research, develop key technologies, and study the implications of LLM use in key sectors, addressing all three tracks of the call, with an emphasis on core technological research.

Partnere og interessenter

UiO, NTNU, National Library (NB), Language Council of Norway (LCN), UiB, UiT, NR, UV/UiO, HF/UiO, JUS/UiO, Integreat, ISF, tankesmien Langsikt, Sámi University of Applied Sciences (SA)

354351: AIM-Health: National Centre for Artificial Intelligence in Medicine and Healthcare (Nasjonalt senter for KI i medisin og helse):

Søkerorg: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Tone Frost Bathen, e-post: tone.f.bathen@ntnu.no

Sammendrag

We must think and act differently to prevent a major healthcare crisis in the next decade. Without a paradigm shift, the need for healthcare personnel will vastly outweigh the available resources. A

dedicated investment in research on AI-based healthcare technology will help close this gap by enabling efficient delivery of high-quality care within the limited resources available. AIM-Health brings together a unique consortium of leading research groups, healthcare providers, users, and industry partners at the forefront of medical AI research. The centre will perform cutting-edge AI method development and trustworthy clinical evaluation and innovation, exploiting existing and new multi-modal data sources such as electronic health records, sensor data, patient-reported data, multilevel omics data, and medical images. This work will build on decades of domain experience and established infrastructure. AIM-Health will be a national effort to develop trustworthy AI technologies that will impact the entire breadth of the healthcare sector.

Partnere og interessenter

NTNU, UiB, UiT, UiO, SINTEF, HVL, NORCE, FHI, CRN NIPH, St. Olavs, OUS, UNN, HUS, Vestre Viken, Levanger Hospital, HUNT Research Centre, SPKI, Norwegian Centre for E-health Research, GE Healthcare, DNV, VitalThings, Livv Health, InMotion, AI ThinkLab, Mia Health, The We Effect, DIP

354352: Norwegian Center for Generative AI:

Søkerorg: Institutt for datateknologi og informatikk

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Ole Jakob Mengshoel, e-post: ole.j.mengshoel@ntnu.no

Sammendrag

With the advent of large language models (LLMs) and ChatGPT, AI has become accessible and relevant to everyone. The next significant AI development is Multimodal generative AI (MGAI). MGAI promises to revolutionize every sector of society by integrating and generating content across text, images, audio, sensor data and video. While MGAI holds tremendous potential for advancing technology and improving user experiences, it also presents risks that need to be carefully managed. The proposed MGAI center will investigate how AI technology can be further developed and adapted to the unique needs of Norway's public and private sectors while ensuring that potential negative consequences are minimized. The Center will research and develop core MGAI technology to drive innovation, improve efficiency, and ensure sustainable development tailored to Norway's priorities.

Partnere og interessenter

NTNU, Arbeidstilsynet, Arkivverket, Høgskolen i Innlandet, NGI, SINTEF Ocean, Statens vegvesen, Telenor, Universitetet i Oslo, Visma, Nasjonalbiblioteket, University of Palermo

354353: AIDEAL- AI for the Energy and Ocean Economies:

Søkerorg: SINTEF ENERGI AS

Ansvarlig org.: SINTEF ENERGI AS

Kontaktperson: Chiara Caccamo, e-post: chiara.caccamo@sintef.no

Sammendrag

The AIDEAL centre will create value and wealth for the Norwegian economy and society by (1) bridging AI research and industrial expertise; (2) developing new AI solutions to increase productivity in the energy (CCS and Hydrogen value chains, wind and smart grid) and marine sectors (maritime, fishery and new bio-marine tech.); (3) fostering social and industrial acceptance, and working towards sustainable transition scenarios; (4) validating the most suitable technologies in the lab or in

a relevant environment and developing an innovations' pipeline for new products and services in two of Norway's most strategic sectors. Innovations and growing national value chains are expected to enlarge the energy and ocean economies, create additional and new jobs, and maintain wealth for the Norwegian society. AIDEAL's mission is to develop cutting-edge AI techniques, reinforce national and international collaborations, and provide a solid foundation for a just and clean energy transition that leverages Norway's strengths.

Partnere og interessenter

SINTEF Energy Research, SINTEF Digital, SINTEF Ocean, NTNU, UoS, Western Norway University of Applied Sciences, Simula, University of Bergen, University of Oslo, NORSAR

354354: Skisse- Kunstig intelligens for saksbehandling:

Søkerorg: MACHINA AS

Ansvarlig org.: MACHINA AS

Kontaktperson: Sindre Lien Oftebro, e-post: sindre@machina.no

Sammendrag

Machina AS er en bedrift som leverer saksbehandlingsløsninger til privat og offentlig sektor. Vi har i dag et lite KI-team som jobber med å avdekke relevante behov som KI kan brukes i våre eksisterende løsninger for eksisterende kunder, samt utvikle og implementere løsningene. Dette retter seg både mot generativ KI og mer tradisjonelle KI-modeller. Med denne søknaden ønsker vi å signalisere et ønske om å bli matchet inn i et KI-senter, der vi tror vi kan bidra med relevant kompetanse innenfor saksbehandlingsdomenet, samt interessant data og konkrete caser. I et KI-senter ønsker vi å oppnå økt kompetanse og mer erfaring med ulike metoder som kan være hensiktsmessig innenfor vårt domene. Vi representerer i stor grad kundesiden, dataen og behovene, og tror et samarbeid i et senter med mer teknisk/faglig kompetanse innenfor KI vil være gunstig for begge parter

Partnere og interessenter

Machina AS

354355: The Centre for Emerging Technologies in Public Service Delivery:

Søkerorg: SIMULA METROPOLITAN CENTER FOR DIGITAL ENGINEERING AS

Ansvarlig org.: SIMULA METROPOLITAN CENTER FOR DIGITAL ENGINEERING AS

Kontaktperson: Jo Erskine Hannay, e-post: johannay@simula.no

Sammendrag

The center's purpose is to ensure that public service delivery aligns with societal and human values, in acknowledgement that AI technology can exacerbate, alleviate and introduce new challenges. The center will conduct leading-edge research in innovation, technology and consequence with attention to (A) the phases of design, development, deployment, and use of public service delivery, where existing issues of digitalization will be transformed into new variants due to benefits and disbenefits of AI (B) the architecture of public service stacks; i.e., how the layers of operational processes interconnect with layers of digital solutions that include AI technology, where this will trigger a need for combining machine reasoning with machine learning (C) the policy and governance of AI-

integrated digitalization, where policies, strategies and goal formulations must be adaptive to account for evolving knowledge on emerging technologies.

Partnere og interessenter

Oslo Met, NTNU, SINTEF, UiO, UiA, FHI

354356: Center for Ethical and Efficient Empowerment through Empathic AI:

Søkerorg: Institutt for informatikk

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Carsten Griwodz, e-post: griff@ifi.uio.no

Sammendrag

E4AI's mission is to harness AI to enable humans' natural abilities and serve them better by understanding individual human emotions and their states of mind, supporting their agency and autonomy, and thereby empowering them to overcome physical, mental and social limitations, enabling them to achieve what was previously unattainable. The AIs must therefore learn Empathy, enabling them to understand and respond to groups' and individuals' affective states and social environments. They must adapt to and augment human capabilities in an intuitive manner, learning what the human needs, and not the other way around. Newly developed AIs of E4AI are built to understand humans, the dynamics they are situated in, their embodiment and emotional consequences. They must adhere to ethical standards and safeguard human's privacy in every action that they take or avoid taking and do this in sustainable, resource-efficient ways.

Partnere og interessenter

UiO: MN IFI & ITS, HF IMV, SV PSI; SimulaMet; Sintef; NTNU: IIK

354357: Centre on AI & Governance (CAIGE):

Søkerorg: DET JURIDISKE FAKULTET

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Malcolm Langford, e-post: malcolm.langford@jus.uio.no

Sammendrag

AI brings risks and opportunities for national and international governance. Risks include a weakening of the rule of law, erosion of democracy, enhanced cybercrime and surveillance, and environmental and economic costs. Opportunities include using AI to improve the quality of governance, including by reducing human bias, extending legal aid, identifying citizens' needs, and improving judicial and administrative efficiency. The proposed Centre on AI and Governance (CAIGE) will (1) investigate the social, legal, and ethical consequences of AI and develop new governance models to mitigate and manage risks; (2) research how AI technology can be mobilised to improve governance, with a focus on automation, LLMs, and explainable AI; and (3) innovate with new AI tools for improving governance in practice, including AI-based compliance mechanisms. This will be achieved through creating a national centre with leading researchers and a platform for user and international partners.

Partnere og interessenter

UiO, BI, NR, UiB, UiT, NORCE, PHS, OsloMet, NUPI, UiS, KU

354358: Artificial intelligence for comprehensive healthcare (AI-CARE):

Søkerorg: SYKEHUSET ØSTFOLD HF

Ansvarlig org.: SYKEHUSET ØSTFOLD HF

Kontaktperson: Waleed Ghanima, e-post: Waleed.ghanima@so-hf.no

Sammendrag

With an aging population and a shortage of healthcare workers there is an urgent need for innovative approaches to improve patient care and health outcome, and optimize the use of available healthcare resources. AI-CARE, a cross-disciplinary collaboration between Østfold Hospital Trust, Østfold University College, Hospital Pharmacies Enterprise and municipalities in the Østfold region, aims to develop and utilize artificial intelligence (AI) technologies to address these key healthcare challenges. AI technologies will be integrated into municipal and specialist healthcare to optimize diagnostic and treatment pathways, ensure timely access to care, and maximize resource efficiency. To achieve this, AI-CARE will combine expertise in healthcare and technology, and harness real-time data in accordance with legal frameworks and ethical guidelines, including data from clinical and administrative systems accumulated in Østfold Hospital Trust's cutting-edge data warehouse.

Partnere og interessenter

Østfold Hospital Trust (SØHF), Østfold University College (HiØ), Sarpsborg kommune, Indre Østfold kommune, Moss kommune, Råde kommune, Våler kommune, Vestby Hospital Pharmacies Enterprise (SAHF)

354359: Kunstig intelligens for geografisk informasjon:

Søkerorg: STATENS KARTVERK

Ansvarlig org.: STATENS KARTVERK

Kontaktperson: Astrid Marie Muggerud, e-post: Astrid.Marie.Flattum.Muggerud@kartverket.no

Sammendrag

KI for geografisk informasjon har et stort potensial for å effektivisere og forbedre oppgaver som ressursforvaltning, arealplanlegging- og utvikling, katastrofeberedskap, miljøovervåking og transportlogistikk. KI og geografisk informasjon vil utgjøre en essensiell del av digitalisering og tilrettelegging for et fremtidsrettet samfunn og har stort potensial for verdiskaping i næringslivet og det offentlige. GeoKI-senteret skal utforske, utvikle og anvende KI for å styrke, effektivisere og utvide bruken av geografiske data og analysemetoder. Forskningen skal forbedre søkbarhet, tilgang, integrasjon og nøyaktighet av geodata gjennom avansert KI, samt utvikle kunnskap om mulige konsekvenser, infrastruktur og standardiseringsbehov for sikker bruk av KI på geodata i samfunnskritiske prosesser. Ambisjonen er at Norge skal være ledende i utvikling av geografisk informasjon tilrettelagt for KI, og i bruk av KI for å øke potensialet i geografisk informasjon

Partnere og interessenter

Kartverket, Nibio, NGI, Miljødirektoratet, Norsk Kommunalteknisk forening (NKF), Universitetet i Agder (UiA), Norsk Regnesentral, Vestlandsforskning, Norkart AS, Geodata AS, Å Energi, Glitre Nett, ESRI, EUROSD

354360: SUsustainable cities by Human centered artificial Intelligence (SUSHI):

Søkerorg: SINTEF ENERGI AS

Ansvarlig org.: SINTEF ENERGI AS

Kontaktperson: Marie Bysveen, e-post: marie.bysveen@sintef.no

Sammendrag

The objective of SUsustainable cities by Human-centred artificial Intelligence (SUSHI) is to advance AI methodology and AI-driven innovation addressing the challenge of planning and operating cities that are attractive for people to live in. All over Europe, city governments struggle to involve the public to adopt sustainable solutions. In the transition towards sustainable cities, it is not enough to have the solutions, they must be fully integrated in the planning of cities in a way that engage and improve people's everyday lives. Starting with the infrastructure sectors energy, logistics and build environment, we aim to develop AI technologies to 1) Combine data and do simulations across heterogeneous digital data in different sectors and 2) Enable efficient and democratic planning and operation in local municipalities. All results will be open to innovation communities and to the public to access, analyse and develop new products and services for future cities.

Partnere og interessenter

SINTEF

354361: AI for Business and Society:

Søkerorg: NORGES HANDELSHØYSKOLE

Ansvarlig org.: NORGES HANDELSHØYSKOLE

Kontaktperson: Bram Timmermans, e-post: bram.timmermans@nhh.no

Sammendrag

Artificial Intelligence (AI) automates increasingly sophisticated tasks offering efficiency gains. This opens up opportunities to significantly boost innovation capacity and productivity across various sectors. As the costs of AI-powered tools and applications decrease and their accessibility increases, AI echoes the impact of past transformative technological innovations like the steam engine or electricity had on business and society, only much faster. Like these past technological innovations, but much more abruptly, AI is already reshaping business models, organizational practices, and the societal institutions that underpin our welfare state. To enable businesses and society to navigate these challenges while at the same time fully reaping the benefits from the opportunities AI brings, the goal of this center will be to explore how (private and public) organizations can create and capture sustainable value from AI, how AI affects labor markets, and how AI impacts the economic structures and funding of the welfare state.

Partnere og interessenter

Telenor, KPMG, Tietoevry, Gjensidige, Sparebanken Vest, Bergen Municipality, Norwegian Tax Authority, DIGDIR, NAV, Finnmark County, Virke, Abelia, Bergen Chamber of Commerce and Industry, NCE Finance Innovation, AI Danmark, Stockholm School of Economics, UiO Informatics, BI Department of Data Science and Analytics (oppdatert 21jun)

354362: MISAKI- Leveraging and developing AI for holistic socioeconomic-environmental analysis and sustainability transition.:

Søkerorg: NORSK INSTITUTT FOR VANNFORSKNING

Ansvarlig org.: NORSK INSTITUTT FOR VANNFORSKNING

Kontaktperson: Kristoffer Kalbekken, e-post: kristoffer.kalbekken@niva.no

Sammendrag

Escalating biodiversity loss, resource exhaustion, pollution and altered climate pose a challenge to social-environmental systems, affecting socioeconomic development. Overwhelming complexity impedes reliable predictions of these systems' responses to interventions, hindering planning for sustainable economic development. AI can help address this complexity. Our centre will integrate process-focused knowledge and big data from environmental sensors with social data taken from real-life cases to train AI in generating predictions and simulating intervention strategies for sustainable development. MISAKI will equip Norway with AI capabilities for complex adaptive systems analysis and simulation, integrating them into national infrastructures for earth system observations. We will work to inform sustainability transition – a main strategic goal for Norway – centralizing stakeholders' involvement and collective oversight in AI development to ensure ethical and trustworthy use of this technology, and long-lasting benefits to Norwegian environment and society.

Partnere og interessenter

Akvaplan-NIVA, Stiftelsen NILU, Norsk institutt for naturforskning (NINA), Norsk Regnesentral (NR), Norges teknisk-naturvitenskapelige universitet (NTNU)

354363: KIOS- Kunstig Intelligens i Offentlig Sektor:

Søkerorg: NORCE Teknologi/Energi VESTLAND

Ansvarlig org.: NORCE NORWEGIAN RESEARCH CENTRE AS

Kontaktperson: Annette Fagerhaug Stephansen, e-post: anst@norceresearch.no

Sammendrag

KIOS-senteret vil fremme bruk av kunstig intelligens (KI) i offentlig sektor gjennom forskning på teknologiutvikling, legitimitet, tillit og brukervedvirkning. Gjennom et tverrfaglig samarbeid vil en sikre at en utvikler gode løsninger som 1) øker kvalitet og effektivitet av offentlig sektor, som 2) blir tatt i bruk og er en god støtte i arbeidshverdagen til ansatte, og som 3) blir oppfattet som gode løsninger også av befolkningen. Norge er et land der en har generelt høy tillit til offentlig sektor, og det er særdeles viktig at bruken av KI ikke bidrar til å svekke denne tilliten. Senteret vil se på risikoen ved bruk av KI til forskjellige tjenester/behov, og fremme forskning og kunnskapsdeling som kan minske denne risikoen. I tillegg vil senteret fokusere på innovasjon innenfor KI-baserte løsninger for å møte utfordringene og mulighetene i fremtidens offentlige tjenester.

Partnere og interessenter

Norce

354364: AI-driven diagnostic Assistant for Medical Applications:

Søkerorg: Institutt for økonomi, historie og samfunnsvitenskap

Ansvarlig org.: UNIVERSITETET I SØRØST-NORGE

Kontaktperson: Boban Vesin, e-post: bve@uan.no

Sammendrag

This project explores the integration of artificial intelligence in healthcare to enhance medical diagnostics, improve patient outcomes, and streamline the work of healthcare professionals. We aim to develop a web-based AI diagnostic assistant that supports doctors and enhances medical students' digital skills. The assistant will analyze scintigraphy images using image processing, interpreting blood analysis data with statistical models and machine learning, and utilize natural language processing to extract relevant information from patient histories. Our research will involve designing, implementing, and evaluating this tool to determine its effectiveness and adoption. The expected outcomes include improved diagnostic accuracy, increased efficiency, and greater adoption of AI tools in clinical practice, contributing to the advancement of AI in healthcare.

Partnere og interessenter

University of South-Eastern Norway, University of Novi Sad Serbia, Federal Rural University of Pernambuco Brazil, Aibox Lab Brazil, NTNU

354365: Norwegian Centre for Embodied AI:

Søkerorg: Institutt for teknisk kybernetikk

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Konstantinos Alexis, e-post: konstantinos.alexis@ntnu.no

Sammendrag

Embodied Artificial Intelligence (AI) is the scientific domain that bridges mind and matter and represents a pivotal shift in overcoming the boundaries of software-AI by integrating physical presence and interaction with the environment. Realized through autonomous robots, Embodied AI holds the promise to alter how work tasks are conducted, how we live our lives and how societies function. Motivated by the above and reflecting on the current limitations in robotics science and systems, this centre aims to investigate a comprehensive science of resilient autonomy for embodied intelligence, shall link groundbreaking results with industry needs, will facilitate the educational environment to best prepare the next generation of scientists and engineers, and shall take an active role to prepare our societies for an era of ubiquitous robots. To serve its goals, the centre builds upon a diverse set of scientists in Norway, involves industry collaborations and key international support.

Partnere og interessenter

NTNU, UiO, UiT, OsloMet

354366: Centre for Neuromorphic Electronics:

Søkerorg: Senter for materialvitenskap og nanoteknologi

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Henrik Hovde Sønsteby, e-post: henrik.sonsteby@kjemi.uio.no

Sammendrag

The Centre for Neuromorphic Electronics (CNE) will revolutionize AI hardware by developing brain-inspired neuromorphic devices. As traditional silicon technology reaches its limits, CNE will create more efficient and sustainable electronics with new materials and device architectures based on physical manifestations of neural networks. This initiative will empower Norwegian entrepreneurs and industries to capture significant market shares in the multi-billion dollar edge computing market. CNE's interdisciplinary research will advance fundamental science and practical applications, enhancing our understanding of biological neural networks and creating a resilient materials platform. By fostering innovation and training the next generation of technologists, CNE will ensure that Norway can take an active role in the AI hardware revolution. The centre's impact will extend beyond its lifetime, driving sustainable innovation and economic growth within the field.

Partnere og interessenter

UiO, SINTEF, NMBU

354367: KI-RISK – senter for analyse og håndtering av samfunnsrisiko ved kunstig intelligens:

Søkerorg: SINTEF AS

Ansvarlig org.: SINTEF AS

Kontaktperson: Asbjørn Følstad, e-post: asf@sintef.no

Sammendrag

En omfattende innføring av KI innebærer høy samfunnsmessig risiko. Senter for KI-RISK samler forskningsorganisasjoner, offentlige virksomheter og næringslivsaktører for å utvikle nødvendig kunnskap og teknologi for å analysere og håndtere samfunnsmessig risiko ved utvikling og anvendelse av KI. For å få til en tilstrekkelig behandling av temaet vil senteret adressere grunnleggende kunnskaps- og teknologibehov knyttet til demokratiske, verdimeslige og sosiale aspekter ved KI. Vi vil gjennomføre forskning og teknologiutvikling for å håndtere risiko tilknyttet KI-utvikling og –anvendelser med særlig vekt på følgende sentrale samfunnsområder: medier og informasjonsflyt, samfunnssikkerhet, kunnskapsutvikling, utdanning og arbeidsliv, og offentlige tjenester. Forskningen skal styrke samfunnets motstandskraft mot negative implikasjoner av KI og fremme effektiv anvendelse av KI til verdiskaping og samfunnsnytte.

Partnere og interessenter

SINTEF, Medietilsynet, Digitaliseringsdirektoratet, Datatilsynet, Barne- ungdoms- og familiedirektoratet, Utdanningsdirektoratet, Direktoratet for høyere utdanning og kompetanse, Likestillings- og diskrimineringsombudet, Forbrukerrådet, Nasjonal sikkerhetsmyndighet, Direktoratet for samfunnssikkerhet og beredskap, Politiets sikkerhetstjeneste, Etterretningsskolen, Amnesty, Wikimedia, Redd barna, Faktisk.no, VG, Factive

354368: Insight- New AI Methods for Innovative Use of Public Documents:

Søkerorg: Institutt for informasjons- og medievitenskap

Ansvarlig org.: UNIVERSITETET I BERGEN

Kontaktperson: Andreas Lothe Opdahl, e-post: andreas.opdahl@uib.no

Sammendrag

The centre will develop and evaluate new AI techniques for parallel symbolic (such as knowledge graphs) and sub-symbolic (such as large language and multimedia models) representation and reasoning with applications to innovative uses of public documents in sectors such as local journalism, local governance, research and archives. The centre will also conduct interdisciplinary AI and social-science research to investigate challenges and opportunities of AI in context of legitimacy, trust, privacy, and other legal and ethical considerations. The centre will build on AI and societal research to develop, implement and evaluate new prototype systems and services in collaboration with its application and technology partners. The centre will also emphasise researcher education and competence building.

Partnere og interessenter

Univ. of Bergen, Center for Investigative Journalism (SUJO); Univ. of Stavanger, Dept. Elect.Eng. and Computer Science Western Norway Research Institute iTromsø, Polarisgruppen, The National Archive, The National Library

354369: SAIF– Centre for Sustainable AI Research Futures:

Søkerorg: UNIVERSITETET I BERGEN

Ansvarlig org.: UNIVERSITETET I BERGEN

Kontaktperson: Inge Jonassen, e-post: inge.jonassen@uib.no

Sammendrag

The Center for Sustainable Artificial Intelligence Futures (SAIF) will advance foundational AI research by addressing theoretical gaps that hinder progress in technology and understanding of societal impacts. Focusing on six areas—uncertainty, algorithms, interoperability, agency, alignment, and hype—SAIF will develop methodologies for sustainable AI advancements. As the international AI research hub in Norway, SAIF will leverage Norway's efficient social structure and trustworthy governance to influence global AI development. The center will integrate theoretical expertise with practical applications, fostering interdisciplinary collaboration and knowledge dissemination. Emphasizing long-term human-centered research, SAIF contributes to robust technological innovation and societal well-being. SAIF will enhance Norway's AI research capacity, attract international talent, and educate future Norwegian AI experts through innovative programs.

Partnere og interessenter

University of Bergen, Kristiania University College, The Norwegian Media Cluster (Media City Bergen), Simula, UiB

354370: Center for Quantum technology and Artificial Intelligence:

Søkerorg: UNIVERSITETET I OSLO

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Morten Hjorth-Jensen, e-post: morten.hjorth-jensen@fys.uio.no

Sammendrag

Artificial intelligence (AI) and quantum technology (QT) hold the promise to revolutionize our life and work. These technologies offer enormous advantages for science, technology, economy, politics and civil society and have the potential to radically change and impact almost every section of our

society. The challenges and opportunities in the field of artificial intelligence and quantum technology call for new types of partnerships and cooperation where QT and AI complement and advance the development of the other. To this end, the present QAI Centre proposal aims at: • Research and development of new methods applied to QT and AI; • Application of new methods and technologies in QT and AI in close collaboration with partners; • Education and knowledge transfer through the development of advanced educational programs in QT and AI in close collaboration with all partners.

Partnere og interessenter

UiO, UiT, Kristiania University College, University of South Eastern Norway (USN), SINTEF AS, Kongsberg (Discovery), Inmeta Consulting, Integrated Detector Electronics AS, Menon Economics, Det Norske Veritas, AstraZeneca Norway

354371: AI Democratization for a Sustainable Future for All:

Søkerorg: Nasjonalt senter for e-helseforskning

Ansvarlig org.: UNIVERSITETSSYKEHUSET NORD-NORGE HF

Kontaktperson: Anne Moen, e-post: anne.moen@ehealthresearch.no

Sammendrag

AIDeA will act as a research center and capability platform for AI development, use and application across various sectors. Its mission is to drive a just, inclusive and sustainable society by democratizing AI resources, and promoting ethical and innovative AI applications for societal advancement. AIDeA will lead efforts to raise awareness, empower citizens, and foster collaboration between academia, industry, public sector and civil society in Norway and globally. Key tasks include exploring AI's effects on healthcare, citizen empowerment, and climate, as well as assessing AI's societal impact on human rights. Technically, AIDeA focuses on secure data access and collaborative high-performance computing to support democratization. In uniting transdisciplinary perspectives, AIDeA is committed to European standards for trustworthy AI through ethical practices, diversity, and inclusive collaboration. This holistic approach ensures AI serves a greater good, benefits all segments of society and promotes sustainable development.

Partnere og interessenter

UiT, UiA, UiS, UiO, NORCE, NTNU, Columbia University, Copenhagen University, Scripps Research, Vanderbilt University Medical Center, DNV, Alfred Surgery, Sparebank1 Nord-Norge, Telenor Research and Innovation, Helse Nord IKT, Lofoten IKT, IKT Norge

354372: Ocean AI center:

Søkerorg: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Hans Petter Hildre, e-post: hans.p.hildre@ntnu.no

Sammendrag

Norway is at the forefront of developing advanced and customized Ocean technologies for demanding operations, with a strong emphasis on safety and environmental concerns. Ocean technology is a field known for its multidisciplinary nature with uncertainties and environmental disturbance. In recent years, there has been a growing interest in utilizing artificial intelligence (AI),

IoT, big data, and cloud computing to design and evaluate the performance, safety, and structural integrity of marine industrial systems, ship intelligence, fishery, coastal infrastructure and operational services. The main objective is to build an Ocean AI center to be the leading knowledge hub within demanding ocean technology and coastal infrastructure. It will support the utilization of AI enabling technology for technology development and new businesses.

Partnere og interessenter

NTNU, Simula, Kystverket

354373: Accelerated Information-Controlled Materials Development:

Søkerorg: Institutt for materialteknologi

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Sondre Kvalvåg Schnell, e-post: sondre.k.schnell@ntnu.no

Sammendrag

AI-CMD will leverage research data from advanced infrastructures and lab-equipment, as well as industrial and process-level data to train AI-agents focused on materials science and engineering applications. AI can increase the value of data from advanced research infrastructures, and find new way to approach industrial problems, based on the large amount of data and the insights from fundamental understanding of materials and materials properties. A multiscale approach, looking at systems from atoms to production facilities, including recycling of used materials, will allow for better use of resources, and potential new supply-lines with less environmental impact. Better utilization of data from expensive and limited research infrastructures, as well as AI-enhanced materials development have gained much attention lately, and a physics based approached to AI and machine learning can be important for developing next generation models and materials.

Partnere og interessenter

NTNU

354374: PAIX- Peace and Artificial Intelligence centre of eXcellence:

Søkerorg: INSTITUTT FOR FREDSFORSKNING

Ansvarlig org.: INSTITUTT FOR FREDSFORSKNING

Kontaktperson: Håvard Hegre, e-post: hhegre@prio.org

Sammendrag

PAIX will examine the dual nature of AI: how it can both act as an engine for peace and represent a threat to security. It will develop and test AI tools that can be used to promote peace and development, and research how to anticipate and counteract the threats to security that AI can pose. To succeed in these objectives, PAIX will bring together peace researchers, data scientists, and practitioners to ensure that the technology we develop is methodologically at the state of the art, is fully informed by recent research on peace and democracy, and tailored to the needs of policy-makers that work in conflict-affected regions. The center has five thematic work packages and four cross-cutting groups that coordinate methodological development, infrastructure, the continuous review of the ethical implications of the work, as well as education and outreach.

Partnere og interessenter

Peace Research Institute Oslo; University of Oslo; University of Agder; Uppsala University; Göteborg University; Essex University; University of Pittsburgh; University of Copenhagen; University of Barcelona; BABL.AI; NORAD; Norwegian Red Cross; UNHCR; UN OCHA; UN FAO (Oppdatert 21juni)

354375: H-AITECH- Human-AI Teaming for Elevating Capabilities Hub:

Søkerorg: INSTITUTT FOR ENERGITEKNIKK

Ansvarlig org.: INSTITUTT FOR ENERGITEKNIKK

Kontaktperson: Jonas Aamodt Moræus, e-post: jonas.moraesus@ife.no

Sammendrag

H-AITECH is a national AI centre conducting pioneering research in Human-AI collaboration, emphasizing human-centred AI design and development to extend human capabilities and re-think future work and life. Building on the Nordic working life model, the centre will move Norway into the forefront of AI innovations – filling the gap between technology and humans. H-AITECH will tighten the loop from research to application, to provide rapid and easy access to cutting-edge results, actively sharing new knowledge with the industry. Enabling Norwegian companies to quickly adapt and leverage innovative research will give a competitive edge internationally. The partners have decades of expertise in human factors, organisational factors, human-computer interaction, AI and human-centred AI from international and national research, giving us unique competence to position Human-AI Teaming as the leading field of international expertise for Norway.

Partnere og interessenter

IFE, SINTEF, UiA

354376: AI hub on Medical biotechnology:

Søkerorg: SINTEF AS

Ansvarlig org.: SINTEF AS

Kontaktperson: Geir Klinkenberg, e-post: geir.klinkenberg@sintef.no

Sammendrag

The integration of AI in medical biotechnology promises transformative advancements, overcoming challenges that traditional methodologies cannot resolve. Achieving technically robust and societally transparent AI models necessitate high-quality, broadly validated, and fully traceable training datasets. Medical biotechnology is uniquely positioned to provide these datasets. The AIMbio center aims to leverage medical biotechnology to develop innovative AI solutions for pattern recognition, knowledge transfer, insight, autonomy, collaboration, and explainability. This process will utilize the entire medical biotechnology value chain, from drug discovery to production, as a test bed for AI implementation. AIMbio partners bring cutting-edge AI expertise, state-of-the-art automated high-throughput laboratory facilities for data generation, AI model validation, and extensive experience in advancing the Norwegian enterprises, making AI an indispensable tool for progress in medical biotechnology.

Partnere og interessenter

SINTEF, NTNU

354377: AMIVE: Autonomous Multi-agent based systems: challenges with Interoperability, Verification&validation and Explainability.:

Søkerorg: NORCE Teknologi/Energi VESTLAND

Ansvarlig org.: NORCE NORWEGIAN RESEARCH CENTRE AS

Kontaktperson: Rodica Mihai, e-post: rodica.g.mihai@norceresearch.no

Sammendrag

The AI centre AMIVE aims to facilitate responsible uptake of complex high-risk AI systems in practice. This is done by researching on a framework that allows for smooth and robust collaboration of distributed high-risk AI systems from multiple providers. The goals of the framework are to enable proper verification and validation, ensure safety and human oversight, and provide adequate explanations that can support online decisions. AMIVE will assess the AI methods developed within two use cases: (1): resilience and optimization of energy systems managing multiple energy sources, storage facilities and consumers; (2): on management of autonomous vehicles/devices. This includes research on collaborative decision-making for observation and diagnostics, to address process optimization, resilience, and disaster management. Dedicated replication use cases are envisioned as part of in-kind contributions and/or spin-off projects.

Partnere og interessenter

NTNU, UiB,UiA, UiS,

354378: Cognitrix– Generic multi-sensor AI to enable better perception and interaction with the real world:

Søkerorg: SINTEF DIGITAL

Ansvarlig org.: SINTEF AS

Kontaktperson: Ahmed Kedir Mohammed, e-post: ahmed.mohammed@sintef.no

Sammendrag

How to connect AI to the real world? Using sensor data and a priory knowledge in AI to perceive the world enabling interaction with the physical world. Going from the physical to the digital world by: - Enable Norwegian actors to go from qualified users of existing established methods to be in control of their own AI development making trustworthy models, and not fitting their data to existing solutions. - Developing foundation models that simultaneously input all sensor data sources and train a data representation that learns the relationships inherent in the data. This enables flexible models for dynamic industrial environment taking varying input data and translates data to information better than through traditional sensor fusion. We will develop a digital unsupervised "sensorium" utilizing the industries' knowledge and a generic multi-sensor AI model to improve model generalization and reduce time and data requirements for training.

Partnere og interessenter

SINTEF, NTNU

354379: EyeAI- Artificial Intelligence for Solving Inverse Imaging Problems:

Søkerorg: Institutt for fysikk

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Dag Werner Breiby, e-post: dag.breiby@ntnu.no

Sammendrag

EyeAI is a truly multidisciplinary AI initiative aiming to increase Norwegian competitiveness in the fields of scientific imaging, microscopy, and spectroscopy. The main objective is to further develop and actively employ AI to solve inverse problems relating to scientific imaging, in its widest sense of experimental observation deploying electromagnetic radiation ranging from infrared via optical to X-rays (incl. CT), and complementary magnetic resonance (MR). Inverse problems are ubiquitous in science and engineering: how can an object be reconstructed and understood, based on incomplete, noisy, and possibly biased measurement data? Propelled by rapidly developing AI algorithms and hardware capabilities, EyeAI will boost education, green shift understanding and diagnostics. With the EyeAI centre, we aim to address these diverse aspects of computational imaging from AI, mathematical, bio- and geophysical, pedagogical, and societal perspectives including new ethical challenges.

Partnere og interessenter

NTNU, USN, SINTEF, NMBU, Equinor

354380: Artificial Intelligence Learning and Operationalization

Resource centre:

Søkerorg: SINTEF NORD AS

Ansvarlig org.: SINTEF NORD AS

Kontaktperson: Truls Bakkejord Ræder, e-post: truls.rader@sintef.no

Sammendrag

Senteret skal være et kompetansesenter for utvikling og bruk av kunstig intelligens i havbruksnæringa. I tett samarbeid med næring, klynger, teknologileverandører, andre sentere, og innovasjonsmiljøer, vil det fokusere på tre forskningsområder: Data og Kvalitet, Nye KI-modeller og teknikker, og Operasjonalisering og Anvendelser. Her vil det 1) utvikles forbedrede metoder og standarder for datainnhenting, prosessering, og deling av det svært varierte datatilfanget i næringen; 2) utvikle nye KI-modeller som bidrar til å løse sentrale utfordringer i næringa relatert til blant annet fiskevelferd, telling, individgjenkjenning, biomasseestimering, fôring, og sykdomsutbrudd; 3) utvikle brukervennlige beslutningsstøttesystemer basert på disse modellene som raskt kan tas i bruk av og gi verdi til næringa og på en bærekraftig måte styrker fiskevelferd, matsikkerhet, og forvaltning av felles ressurser.

Partnere og interessenter

SINTEF Nord AS, SINTEF AS, SINTEF Ocean AS, Gratanglaks AS, Salaks AS, Ballangen, Sjøfarm AS, AquaCloud, UiT

354381: AI Center for Vaccines:

Søkerorg: UNIVERSITETET I OSLO

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Ludvig Andre Munthe, e-post: l.a.munthe@medisin.uio.no

Sammendrag

The AI Centre for Vaccines is focused on the development of AI-based T cell vaccine design pipelines, targeting viral diseases and cancers where traditional vaccine approaches have fallen short. By leveraging AI technologies, the center aims to create broadly effective and durable T cell vaccines, particularly against Human papilloma virus (HPV), Epstein Barr virus (EBV), and influenza viruses, which have posed significant challenges due to chronic infection and immune evasion or rapid antigenic variation. We plan to utilize advanced AI for epitope mapping and vaccine candidate design, combined with robust validation and preclinical testing protocols. The Center will build on existing expertise and infrastructure, integrating leading institutions to enhance the research and development process. The societal impact of the Center's work is expected to be substantial, addressing critical gaps in current vaccine strategies and enhancing global health security against future pandemics and endemic viral-associated cancers.

Partnere og interessenter

UiO, OuS, UiB

354382: Arete-senteret for kunnskap og innovasjon knyttet til KI i utdanningen.:

Søkerorg: Institutt for fysikk

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Per-Odd Eggen, e-post: per.eggen@ntnu.no

Sammendrag

Målet med Arete-senteret er å bidra med innovasjon og kunnskap knyttet til bruk av kunstig intelligens (KI) for å øke relevans, kvalitet og demokratiske rettigheter i opplæringen fra grunnskole til universitet og bedriftsintern opplæring og bidra med innovasjon og kunnskap knyttet til • hvordan KI kan bidra til læring og hvordan opplæringen bør endres med hensyn til form og innhold når teknologien brukes som hjelpemiddel • hvordan vurderingen bør endres for at sertifisering og rangering skal gi god informasjon om en persons kompetanse og kompetanseutvikling • hvordan små befolkningsgrupper kan beholde og videreutvikle språket sitt med hjelp fra KI. Her vil arbeidet ta utgangspunkt i sørsamisk språk og kultur, men kunnskapen som etableres kan like gjerne komme til nytte for andre språk og kulturer, inkludert den norske.

Partnere og interessenter

NTNU, Trøndelag fylkeskommune, Trondheim kommune, Snåsa kommune, NDLA, Keenious, Institutt for energiteknikk (IFE)

354383: Research Centre for Social Conditions, Consequences & Co-Creation of AI:

Søkerorg: UNIVERSITETET I AGDER

Ansvarlig org.: UNIVERSITETET I AGDER

Kontaktperson: Alexander Ruser, e-post: alexander.ruser@uia.no

Sammendrag

This centre is an interdisciplinary research and civil engagement hub dedicated to exploring and addressing the social conditions, consequences and co-creation of AI. The centre's activities will revolve around three core values (Trust, Transparency & Accountability) and five guiding principles (Research Excellence, Responsiveness and Care, Responsibility, Readiness and Reflection). The overarching goal of the centre is to institute, manage and sustain an innovative, integrated research environment based on five thematic labs to facilitate the development of cutting-edge research on specific challenges (intra-lab activities), provide an exploration space for emerging topics (inter-lab activities) and to respond to social needs by promoting knowledge co-creation and social innovation (trans-lab activities).

Partnere og interessenter

UiA, NAV, SINTEF DIGITAL, KS, Digi Agder, CEDIC (OsloMet), FORTHEM, Arena UiO, NORCE, DIGIT, Kartverket, GoForIT, ImpactStartUP, Agder IKT, Kunstsilo, Kristiansand kommune

354387: Centre for automatic language analysis in psychotherapy research:

Søkerorg: Divisjon psykisk helsevern

Ansvarlig org.: HELSE BERGEN HF

Kontaktperson: Stein Frostad, e-post: stein.frostad@helse-bergen.no

Sammendrag

Centre for automatic language analysis in psychotherapy research is aiming at improving psychotherapy by using artificial intelligence (AI) for automatic analyses of voice recordings of psychotherapy sessions. The voice recordings will be automatically transferred to text by AI to allow for subsequent AI-based analysis of the text. An example of how automatic language analysis can be used for improvement of psychotherapy for anorexia nervosa is presented. AI can be used to detect early verbal signs of dropout from treatment allowing for the development of improved psychotherapy manuals. Similarly, this research may pave the way for using automatic language analysis to improve psychotherapy for individual patients.

Partnere og interessenter

Helse Bergen

354388: Center for Sustainable Human-aligned AI at Scale:

Søkerorg: SIMULA RESEARCH LABORATORY AS

Ansvarlig org.: SIMULA RESEARCH LABORATORY AS

Kontaktperson: Baltasar Beferull-Lozano, e-post: baltasar@simula.no

Sammendrag

SAGE will conduct foundational interdisciplinary research in Sustainable AI, addressing the environmental, social, and economic challenges, including carbon footprint, resource utilization,

biases, transparency, and e-waste. It will focus on four areas: 1) Mechanistically-informed resource-efficient and reliable machine learning (ML), emphasizing automated ML, precise uncertainty tracking, causal learning, and provable convergent optimization for low sample-complexity learning, exploiting inductive biases; 2) Joint optimization of sensing, computing (including Bio-inspired and Quantum), networking across the IoT-edge-HPC/Cloud continuum, co-designing distributed scalable ML and networks to enhance energy footprint, reliability, and latency of ML training, inference, and control; 3) Human-alignment, focusing on human feedback, (unwanted) bias corrections, transparency, and ethics; 4) Integrated sustainable designs for AI enablers and applications (energy, climate change, industry, transportation, health, public sector).

Partnere og interessenter

SIMULA, UiO, NTNU, NMBU, SINTEF, NILU, IFE, Institutt for Samfunnsforskning (ISF), Cicero, Telenor, DNV, Statens Vegvesen (SVV), Equinor, Statkraft

354389: Reliable and responsible AI Solutions for Environmental challenges (RAISE-UP):

Søkerorg: Geofysisk institutt

Ansvarlig org.: UNIVERSITETET I BERGEN

Kontaktperson: Stefan Sobolowski, e-post: stefans@uib.no

Sammendrag

Norway faces challenges arising from the physical impacts of climate change, risks associated with the shift to a low carbon society and the effects on the Norwegian economy. RAISE will address these challenges by leveraging recent AI advances in weather, climate & environmental monitoring and forecasting. By incorporating physical knowledge into custom AI-based algorithms, RAISE will develop applications to monitor critical ecosystems, predict the future evolution of the coupled earth system, and develop innovative products and services that assess impacts, mitigate risks, and enable action. Importantly, RAISE will target chat-based applications that democratize and diversify knowledge sharing and usher in a new era of accessible environmental information for the public and private sectors as well as society at large.

Partnere og interessenter

The Norwegian Meteorological Institute (MET), Norwegian Institute for Marine Research (IMR), Norwegian Computing Center (NR), Department of Informatics (UiB), Department of Mathematics (UiB), Norwegian Research Center AS (NORCE), Nansen Environmental and Remote Sensing Center (NERSC), Center for Science and the Humanities (UiB), Norwegian School of Economics (NHH), SINTEF

354390: AI Centre for Healthcare Foundation Modelling:

Søkerorg: Institutt for nevromedisin og bevegelsesvitenskap

Ansvarlig org.: NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Kontaktperson: Erling Tronvik, e-post: erling.tronvik@ntnu.no

Sammendrag

A single, foundational, infrastructural intervention—a comprehensive platform for building, evaluating and applying Large Medical Models (LMMs) in the clinical domain—can cost-effectively

unlock the enormous potential for AI in medicine and deliver in the realm of healthcare the transformative impact that large language models have delivered in the realm of language tasks. Indeed, the impact will be greater, for the complexity of the biological domain exceeds that of language, and the benefits of creating a platform for modelling it with high fidelity and equity, will have far-reaching and profound benefits. Our solution has five components: an accessible, interoperable, extensible digital platform; a suite of LMMs; a framework for utilizing LMMs in inferential, predictive, and prescriptive tasks in medicine; a framework for quantifying and assuring model equity; and framework for quantifying real-world impact of the system. This platform, combined with the availability of high-quality data, will bring enormous benefits to patients and society.

Partnere og interessenter

NTNU IDI, NTNU INB, University College London

354391: Centre for AI-Based Societal Decision Support:

Søkerorg: STIFTINGA VESTLANDSFORSKING

Ansvarlig org.: STIFTINGA VESTLANDSFORSKING

Kontaktperson: Rajendra Akerkar, e-post: rak@vestforsk.no

Sammendrag

Decision support in fields such as public safety and security, critical infrastructure resilience, healthcare, farming and food security (referred societal decision support, hereon) has a considerable societal and economic impact. These fields present serious challenges for decision makers as they entail complex decisions to be made under dynamic, chaotic, uncertain and resource-constrained situations, whilst accounting for contextual factors that are crucial to acceptance of the decisions, such as biases, risk perception, and trust. The Centre for AI-Based Societal Decision Support (AI-Centre) will nurture a resonant ecosystem that promotes collaborative research and innovations on Human-centred Artificial Intelligence (AI) methods and tools to assist with critical decisions, cultivate the AI talent pool, engage public and private sector in partnerships, and expand entrepreneurship opportunities.

Partnere og interessenter

Western Norway Research Institute, NTNU, SINTEF, University of Bergen, Western Norway University of Applied Sciences, George Mason University, Carnegie Mellon University, Wageningen University, Statsforvaltaren i Vestland, Vestland Fylkeskommune, NAV, Helse Førde, Norwegian Inst. of Public Health, Statens Vegvesen, Sunnfjord Kommune, Oslo Kommune, Geological Survey of Norway, Simplifai AS, Tellu AS, Paneda DAB, Sogn Frukt og Grønt SA, Det Norske Veritas, IT-forum Vest, 7Analytics, Hub Ocean. (oppdatert 21juni)

354392: AI ANTHROPOCENE- artificial intelligence for helping humans understand and act to limit the climate- and biodiversity crisis.:

Søkerorg: SINTEF ENERGI AS

Ansvarlig org.: SINTEF ENERGI AS

Kontaktperson: Brage Rugstad Knudsen, e-post: brage.knudsen@sintef.no

Sammendrag

AI ANTHROPOCENE will develop and use artificial intelligence (AI) in further understanding and limiting the interconnected crisis of climate, nature and biodiversity. High-fidelity, emerging AI methods and tools including machine learning (ML), language models and processing, and hybrid, physics-informed approaches will be developed, tested, and verified to describe and fill knowledge gaps of the Earth's carbon cycle and its asymmetric response to CO2 emissions and removal strategies. By developing AI for merging vast volumes of multi-scale, complex climate data with models, AI ANTHROPOCENE will generate critical knowledge for society by providing new predictive capabilities coupling the anthropogenic carbon balance and man-made emissions with measures to limit these. Doing so, the Centre will strengthen our ability to prioritise mitigation actions towards NET ZERO such as carbon dioxide removal, industrial emissions reduction, as well as controversial geoengineering measures.

Partnere og interessenter

SINTEF Energy Research, NTNU, UiO, SINTEF Digital, Equinor, SIMULA, K-SAT, UiT

354393: Fremskaffe kunnskap for å modernisere bygg-, anlegg- og eiendomsnæringen med utvikling og implementering av Kunstig intelligens:

Søkerorg: NORGES BYGG- OG EIENDOMSFORENING

Ansvarlig org.: Rådet for bygg, anlegg og eiendom (BAE-rådet)

Kontaktperson: Oddvin Breiteig, e-post: oddvin.breiteig@nho.no

Sammendrag

Det ligger enorme verdier i landets 400 millioner kvadratmeter bygningsmasse, 100.000 km vei- og baneinfrastruktur, havner, lufthavner, VA-ledningsnett og annen samfunnskritisk infrastruktur. BAE-rådets organisasjoner står bak dette initiativet, da vi mener utvikling, bygging og forvaltning av bygg, anlegg, samferdsel og infrastruktur har store kunnskapsbehov som kan løses gjennom en økt forskningsinnsats. Kunstig intelligens gir mange muligheter for forbedringer i hvordan vi planlegger, prosjekterer, bygger, vedlikeholder og opererer bygninger og infrastruktur. Riktig utnyttet kan samfunnet, sluttbrukere og landets største fastlandsnæring ta ut stor nytte i form av bærekraft, produktivitet, kostnadseffektivitet, samfunnsikkerhet og driftssikkerhet. BAE-rådet mener KI-senteret må ha et hovedfokus på forskningsutfordringer som kan lede til innovasjon og utvikling, og bygge på et tverrfaglig samarbeid mellom domeneeksperter og KI-eksperter. Det må investeres i å evaluere teknologiens effektivitet og ROI, samt å ta frem ny kunnskap som spres til en hel næring og brukerne.

Partnere og interessenter

Arkitektbedriftene, Rådgivende Ingeniørers Forening (RIF), Maskinentreprenørenes Forbund (MEF), Virke, NHO Byggenæringen, NHO Elektro, Norsk Eiendom og Norsk Bygg og Eiendomsforening (NBEF)

354394: AI Center for Arctic Challenges (IArctic):

Søkerorg: Administrasjon UiT

Ansvarlig org.: UNIVERSITETET I TROMSØ - NORGES ARKTISKE UNIVERSITET

Kontaktperson: Dilip Kumar Prasad, e-post: dilip.prasad@uit.no

Sammendrag

The Arctic, known for its extreme cold, darkness, and isolation, stands as a unique environment on Earth. Its societies, including indigenous communities, have traditionally adapted to these challenging conditions. However, recent factors like global warming and geopolitical instability have introduced new threats. Norway's proactive approach to Artificial Intelligence (AI) across various fronts is crucial for enhancing societal resilience in the Arctic. Collaboration among Norwegian academics, innovators, industry, and the public sector is essential. We require not only a self-sustaining ecosystem for groundbreaking AI developments and its application in addressing Arctic challenges but also a global network of like-minded partners in order to deliver targeted information, products and services with an efficiency not realizable otherwise. The Arctic Center of Artificial Intelligence (iArctic) serves as our answer to this necessity.

Partnere og interessenter

UiT The Arctic University of Norway (UiT) SINTEF Digital (SINTEF-DI) SINTEF Nord (SINTEF-NO) Nord University (Nord) NORCE Norwegian Research Centre (NORCE) Oslo Metropolitan University (OsloMet) Det Norske Veritas (DNV) Oslo School of Architecture and Design (AHO) Telenor Norge (TN) Akvaplan-niva (APN) Alcatel Submarine Networks Norway AS (ASN) Kongsberg Discovery (KD) DeepOcean (DO) Forsvarets forskningsinstitutt (FFI)

354396: Advancing Green Transition through digital transformation and AI-driven optimization:

Søkerorg: FAKULTET FOR REALFAG OG TEKNOLOGI

Ansvarlig org.: NORGES MILJØ- OG BIOVITENSKAPELIGE UNIVERSITET (NMBU)

Kontaktperson: Achim Kohler, e-post: achim.kohler@nmbu.no

Sammendrag

The SUSTaiN centre aims to drive AI development for the green transition. The ultimate aim is to develop AI methodology for optimizing environmental, social, and economic aspects of production, including food, energy, mechanical, electrical, chemical and biochemical production processes. It will further address standardization, cyber security, and scalability to overcome barriers to adoption of AI models. It will develop timely, traceable and explainable AI (XAI) techniques to enhance trust and transparency in AI systems and collaborate with industry stakeholders to develop recognized data standards. SUSTaiN's implementation strategy involves consolidating expertise from multiple research institutions and fostering interdisciplinary collaboration to drive innovation and knowledge exchange. Additionally, SUSTaiN prioritizes workforce re- and upskilling to ensure a smooth transition to AI-driven workflows.

Partnere og interessenter

Norwegian University of Life Sciences (NMBU) NOFIMA, Ås NIBIO, Ås SIMULA, Oslo Veterinary Institute, Ås NTNU, Trondheim SINTEF, Trondheim

354397: KI for bedre beslutningsstøtte i prehospitale tjenester og den utvidede akuttmedisinske kjede:

Søkerorg: SINTEF AS

Ansvarlig org.: SINTEF AS

Kontaktperson: Jan Håvard Skjetne, e-post: jan.h.skjetne@sintef.no

Sammendrag

PreKI senteret har som mål å utvikle og evaluere kunstig intelligens (KI) for prehospital helsetjeneste og akuttmedisinsk kjede. Målet er å sikre optimal undersøkelse og behandling nærmest pasientenes bosted eller skadested, basert på laveste effektive omsorgsnivå (LEON-prinsippet). Senteret skal fungere som et internasjonalt kompetansesenter som skal samle forskere, helsepersonell og teknologer. Sentrale oppgaver inkluderer forskning og utvikling av praksis med bruk av KI, KI metoder, test- og evalueringsmetoder, samt opplæring. Effekten vil være raskere og mer presis diagnostikk, bedre beslutningsstøtte og behandling, samt mer optimal ressursbruk både i helsetjenesten og for andre nødetater.

Partnere og interessenter

SINTEF AS Sykehuset Innlandet HF HelseInn Helsetjenestens driftsorganisasjon for nødnett HF (HDO)
NORSK HELSENETT SF (NHN) Regionalt akuttmedisinsk kompetansesenter i Helse Vest (RAKOS)
Bliksund AS PICTA Prehospital Innovationsarena, Lindholmen Science Park AB, Sverige Västra
Götalandsregionen, Sverige (VGR) Norsk Luftambulans (NLA) Oslo Universitetssykehus (OUS)
Høgskulen på Vestlandet (HVL)

354398: KI for publikumsinnsikt (KIP):

Søkerorg: INFUTURE AS

Ansvarlig org.: INFUTURE AS

Kontaktperson: Camilla A.C. Teffers, e-post: camilla.teffers@infuture.no

Sammendrag

Norge har en rik kunst- og kulturarv, og Henrik Ibsens verker er blant de fremste eksemplene. Utover kulturens egenverdi har den også andre svært viktige egenskaper. For det første bidrar kulturen til styrkingen av demokratiet. For det andre er kulturen både en driver for, og i seg selv, en næring. Det forutsetter imidlertid at kulturuttrykkene når ut til sitt publikum. KI for publikumsinnsikt (KIP) har som mål å i) utvikle syntetiske publikumsinnsikt vha KI og ii) omsette publikumsinnsikten til ønskede gevinster for sektor, næring, samfunn og demokrati. Ibsen-jubileet i 2028, med stort potensial for å tiltrekke seg et internasjonalt publikum, vil være en spyspiss og «living lab» for KI@senteret. Senterets utvikling av KI-modeller, metodikk for å forstå et nasjonalt og internasjonalt publikum og for utnyttelsen av denne innsikten til å nå ut til publikum, vil være relevant for andre enn Ibsens verker, og for bredere sektorer enn kultur, herunder reiseliv.

Partnere og interessenter

Nasjonalbiblioteket Universitetet i Agder, CAIR Senter for Ibsen-studier, Universitetet i Oslo
Hovedorganisasjonen Virke Peer Gynt AS Arbeidsgiverforeningen Spekter Ibsen-museet i Grimstad
Norsk Filminstitutt Fjæreheia Amfi Digital Kulturhus AS Henrik Ibsen's Lost and Found in Translation
Reidar Fuglestad tidl. Kunstsilo

354399: HAIX : A cross-disciplinary sustainable environment for harnessing AI and exascale data and computing:

Søkerorg: Fysisk institutt

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Eirik Gramstad, e-post: eirik.gramstad@fys.uio.no

Sammendrag

One of the biggest AI-related challenges, and one where this centre has a unique advantage, is the collection, handling and use of large (exascale) data. This centre will focus on how to use AI in a reliable and trustworthy way using increasingly large amounts of data from industry and society. This will be achieved with the vast corpus of structured data available from the CERN accelerator complex and experiments, combined with the partner institutes' competence in statistics, heterogeneous distributed computing and machine learning. The centre will bridge fundamental research with technology applications through pilots targeting challenges in robust and explainable AI, safe handling of large data, and green, energy-aware data processing. Outcomes include algorithm development and verification; AI-driven computing management; generative AI for system and component design; and education of the future experts in AI-based systems.

Partnere og interessenter

UiO, UiB, HVL, NTNU, USN, UiA, NorCC, CERN, SFI Offshore Mechatronics, NorduGrid

354400: SkoleFlyt: A platform to facilitate studies on GenAI impact and use in education.:

Søkerorg: FLYT IT AS

Ansvarlig org.: FLYT IT AS

Kontaktperson: Sergii Banin, e-post: sergii@flytit.no

Sammendrag

Flyt IT has started developing SkoleFlyt: GenAI based platform aimed on helping students to improve their knowledge of the subjects they study. GenAI tools like ChatGPT are widely adopted by various groups of people including students. While some educational institutions attempt to restrict students from using GenAI to do their homework one thing is clear: GenAI is here to stay. Thereby research is needed to understand the impact of Gen AI on students' learning, challenges and opportunities, and investigate different, alternative ways to how a Gen AI should work in an educational setting. As SkoleFlyt is in the early stages of development, research partners have a unique opportunity to shape the platform's functionality, enhancing its suitability for conducting research. We are seeking collaboration and partnership with research institutions who are willing to use this unique opportunity.

Partnere og interessenter

Flyt IT, Kristiania University College, OsloMet

354401: Center for research on human augmentation:

Søkerorg: Psykologisk institutt

Ansvarlig org.: UNIVERSITETET I OSLO

Kontaktperson: Thomas Espeseth, e-post: thomas.espeseth@psykologi.uio.no

Sammendrag

The Center for Research on Human Augmentation aims to enhance human capabilities by integrating human-centered AI across brain function, cognition, and societal dynamics. Its primary goals are to

help individuals achieve their aspirations, facilitate cognitive development and learning, improve overall health and well-being, mitigate the effects of cognitive deficits and limitations, and democratize access to knowledge and skills. Advanced AI systems must align with human values, preferences, and needs while avoiding harmful biases and unintended consequences. Personalized AI represents a shift towards customizing AI to reflect individual needs, creating more meaningful interactions. While these systems can transform technology use and social interactions, they pose risks like loss of agency and technology addiction. Therefore, the center focuses on developing AI that enhances accessibility, diversity, and productivity while addressing potential disparities and political polarization.

Partnere og interessenter

UiO

354402: Next Event Prediction by Multidisciplinary Agent Platforms:

Søkerorg: OSLO UNIVERSITETSSYKEHUS HF

Ansvarlig org.: OSLO UNIVERSITETSSYKEHUS HF

Kontaktperson: Ole Christian Lingjærde, e-post: ole@ifi.uio.no

Sammendrag

NEXMAP will pioneer multi-agent multimodal artificial intelligence (AI) systems for event prediction from sequences of past events. The AI methodologies to be developed will apply to many areas and industries and will be investigated and validated on an application area of huge importance to the society: cancer prevention, diagnostics and treatment. Methods will be designed to simultaneously consider the effect of actions on the patient, the health system and society based on incomplete multimodal data sources. An essential element of the research will be to ensure compliance with ethical guidelines, laws and regulations, privacy concerns, principles of fairness, explainability and confidence can be incorporated in the AI system. This goal will be pursued by building a foundation model for cancer medicine based on the vast amount of available data in extensive hospital records, the national cancer registry, public databases and scientific publications.

Partnere og interessenter

OUS

354403: Centre for AI Ethics, Aesthetics and Creative Human

Operations (CAIEAC):

Søkerorg: UNIVERSITETET I BERGEN

Ansvarlig org.: UNIVERSITETET I BERGEN

Kontaktperson: Frans Jacobi, e-post: frans.jacobi@uib.no

Sammendrag

Center for AI Ethics, Aesthetics and Creative Human Operations (CAIEAC) aims to reimagine the integration of artificial intelligence in creative human operations and to challenge hegemonial AI tropes. By moving beyond the binary of utopian and dystopian paradigms, our center embraces a "Prototopian" model that envisions continuous improvement in adjusting AI technologies to society. The center will foster innovative and critical approaches to AI, focusing on computational aesthetics, the expansion of creativity through human-machine collaboration, and the development of new

conceptual frameworks informed by art, media theory, and interdisciplinary research. The center will foster a reflective and inclusive AI landscape that integrates ethical considerations, addresses biases, and promotes decolonial and indigenous knowledge into different AI infrastructures for a culturally diverse society.

Partnere og interessenter

KMD (UiB); Center for Digital Narratives, UiB; Bjerknes Centre for Climate Research, UiB; OsloMet/TKD; Basel Academy of Art and Design (FHNW).

354404: AI-based smart agriculture center:

Søkerorg: ATOMCENT HOLDING AS

Ansvarlig org.: ATOMCENT HOLDING AS

Kontaktperson: Yingpeng Zhen, e-post: yingpeng.zhen@atomcent.com

Sammendrag

With increasing of global population, food security becomes more and more serious in the world. In Norway, ca. 60% of food is imported from abroad, which makes food security an crucial issue. For example, in 2016, Norway imported food products worth 62 billion NOK, and exported only 10 billion NOK. In addition, agriculture is a human resources consuming sector. Nowadays, 20% of global population (1.4 billion people) is working on agriculture. In low income region of the world, the proportion of population in agriculture sector is larger than average. For example, in Africa, 49% of population is working in agriculture sector. AI technology may reshape agriculture sector to solve the food security issue and poverty issue mentioned above in the world. We can produce food using AI-based smart agriculture technology without natural environmental conditions and time limitation in an effective and sustainable way. There are 6 main work packages in the center: (1) AI for water, nutrition and soil monitoring & regulation; (2) AI for crop monitoring; (3) AI for detecting damages and illness of plant/livestock; (4) AI for vertical farming; (5) AI-based automatic harvesting & supply chain system; (6) AI for aquaculture.

Partnere og interessenter

"University of Bergen; Western Norway University of Applied Sciences; SINTEF Industry; NORCE

NTNU; UiT; University of Stavanger; bitUnitor AS"

354405: Centre for AI-Driven Molecular Solutions (AIMS):

Søkerorg: UNIVERSITETET I BERGEN

Ansvarlig org.: UNIVERSITETET I BERGEN

Kontaktperson: Vidar Remi Jensen, e-post: vidar.jensen@kj.uib.no

Sammendrag

The development of AI-based models for molecular discovery has tended to be a theoretical and computational endeavour weakly connected to reality. In fact, most of these tools have not been experimentally verified, and lack true utility in discovery. Many are also "black boxes" from which extraction of relationships between the structure and properties of molecules is hard. AIMS will, by developing methodology based on causal AI and by training and validating these tools using high-throughput (HT) experimentation and high-fidelity molecular modelling, overcome these

limitations and deliver AI-based tools of true utility in molecular discovery. Showcase early applications will include bioactive compounds and catalysts. The IPR-related and societal consequences of the AI-driven technology and innovations will be investigated, making AIMS a highly interdisciplinary centre covering three tracks: technology and innovation as well as their consequences.

Partnere og interessenter

UiB; Univ. of Ottawa; Univ. of British Columbia (CA); Univ. of Hamburg (DE); Univ. Grenoble Alpes (FR)

354406: KI og tillit til dokumentasjon i offentlig forvaltning:

Søkerorg: ARKIVVERKET

Ansvarlig org.: ARKIVVERKET

Kontaktperson: Kristin Jacobsen, e-post: krijac@arkiverket.no

Sammendrag

Arkivverkets samfunnsoppdrag er å sørge for at Norges viktigste samfunnsdokumentasjon blir tatt vare på i et 1000-års perspektiv, slik at den kan brukes som autoritativt bevis, for å beskrive historien, eller til forskning. Som øverste nasjonale arkivmyndighet med hjemmel i arkivloven, har Arkivverket tre nøkkelroller: 1) premissgiver for hvordan dokumentasjonen blir skapt og bevart, 2) forvalter av store mengder historiske data, og 3) utvikling av fagfeltet innen arkiv. Arkivverket bør derfor være en sentral partner i utforskning av problemstillinger knyttet til dokumentasjonsforvaltning, tillit og demokrati i norske KI-sentre. Forskning på bruk av KI i offentlig forvaltning, forklarbarhet og transparens i KI-støttede beslutninger, og automatisering av forvaltningsoppgaver er avgjørende for at KI blir tatt i bruk på en ansvarlig måte i offentlig sektor.

Partnere og interessenter

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354407: Center for Compliance in the Application of AI Technologies:

Søkerorg: SINTEF AS

Ansvarlig org.: SINTEF AS

Kontaktperson: Till Christopher Lech, e-post: till.lech@sintef.no

Sammendrag

While offering a huge potential in terms of effectivisation, cost reductions and new business processes to Norwegian industry and public sector, the roll-out of AI and other data-driven technologies comes with massive challenges in terms of compliance. Given the sheer amount of regulation for the digital economy and risk of sanctions, focus on “trustworthy” or “transparent” or “human-centric” AI is just not sufficient, as long as actors who build, procure, or implement systems cannot make sure that their technology is compliant. C4CAI will gather leading communities in Norway within data management and governance, law, AI and innovation to establish a community of practice and expertise, supporting industry and public sector with both technology, competence and an innovation ecosystem to be ready to take into use data-driven AI in compliance with current and future regulations.

Partnere og interessenter

NTNU (NORWAI); Kristiania University College; City of Trondheim; Bull Law Firm; University of Oslo

354409: Scalable Natural Language Processing for Tracking Clinical Data and Improving Healthcare in Oncology (SCAN-ONC):

Søkerorg: HELSE BERGEN HF

Ansvarlig org.: HELSE BERGEN HF

Kontaktperson: Margrethe Schaufel, e-post: margrethe.aase.schaufel@helse-bergen.no

Sammendrag

This proposal aims to harness artificial intelligence-powered NLP (i.e., large language models) to track diagnostic and patient-centered data in text documents from the electronic health records. The objectives of this proposal are to apply NLP technology already implemented in healthcare systems in the United States, modify to the Norwegian language and documentation styles, validate, and operationalize to identify four domains of text-based data: 1) Pathology reports; 2) Symptoms and treatment toxicities; 3) Goals of care conversations; and 4) Palliative care quality indicators. We will focus on non-small cell lung cancer (NSCLC) because of the high mortality rate of lung cancer, and NSCLC being the most common type of lung cancer. Our long-term goal is to create scalable strategies that provide improved tracking of patient data to support future research and quality improvement projects.

Partnere og interessenter

Harvard University; Cancer Registry of Norway; HelseVest IKT

354411: Norwegian Centre for Artificial Intelligence Research:

Søkerorg: NORSK UTENRIKSPOLITISK INSTITUTT

Ansvarlig org.: NORSK UTENRIKSPOLITISK INSTITUTT

Kontaktperson: Niels Nagelhus Schia, e-post: nns@nupi.no

Sammendrag

Artificial Intelligence (AI) opens up possibilities for economic growth, societal development, knowledge production, increased security, and democratic participation. However, it also reproduces dominant political, societal, and technical discourses and orders, with severe consequences. Hence, the main objective of the Norwegian Centre for Artificial Intelligence Research (No-FAIR) is two-fold: 1) to identify and critically assess the consequences of AI for our present international political environment, focusing on key actors, sites, and processes, and 2) to ensure ethical design, engineering and implementation of accountable AI technology based on a broad global knowledge base through actors, sites and processes. As Norway's leading research institute on the study of foreign policy and international affairs, NUPI, with collaboration partners, is uniquely experienced, skilled and positioned to address the first and third tracks identified in the RCN's call: (i) Societal consequences; and (ii) Innovation.

Partnere og interessenter

Harvard Uni; Cambridge Uni; UiO; UN; UiO; Microsoft; Stanford; UiB; NUPI

354412: ANeED Research Centre for AI-driven cognitive augmentation, clinical decision support and human-AI interaction:

Søkerorg: UNIVERSITETET I BERGEN

Ansvarlig org.: UNIVERSITETET I BERGEN

Kontaktperson: Miroslav Bachinski, e-post: Miroslav.Bachinski@uib.no

Sammendrag

The ANeED Research Centre for AI-driven cognitive augmentation, clinical decision support and human-AI interaction aims to design, develop, and apply AI tools to augment humans with additional cognitive abilities. Such tools will open new ways to support effective and efficient handling of complex tasks, going beyond the capabilities of an individual. Cognitive augmentation will include highly interactive multimodal AI systems with a shared understanding of the user's context and objectives. These systems will give users "superpowers" by making their decision process more effective, efficient and accurate, particularly in complex decision tasks. The research domain of the Research Centre will be in the medical context on clinical decision support for doctors, health workers, and primary family caregivers, as well as assistance for patients affected by neurodegenerative diseases (e.g., dementia) in their independence and everyday tasks in all stages of the disease and their abilities to maintain contact to other people to reduce loneliness.

Partnere og interessenter

Medical Faculty at UiB; Infomedia at UiB; University of Surrey; Law Faculty at UiB; St. Olavs Hospital

354413: Profesjonsutøving, danning og tillit i det 21. århundret:

Søkerorg: HØGSKULEN I VOLDA

Ansvarlig org.: HØGSKULEN I VOLDA

Kontaktperson: Henriette Hafsaas, e-post: Henriette.Hafsaas@hivolda.no

Sammendrag

Forskingssenteret i Møre og Romsdal vil fokusere på korleis KI og andre nye digitale teknologiar påverkar yrkesutøving framover ettersom arbeidslivet vert transformert. Vi vil forske på samfunnskonskvensar, utvikle nye verktøy for yrkesutøving, og undersøke korleis KI og annan digital teknologi vil påverke danning og tillit. Vi vil utvikle innovative og kostnadseffektive verktøy for yrkesutøving og samfunnsutvikling i samarbeid med arbeidslivet. KI vil endre mange av yrka som er essensielle for velferds-samfunnet vårt, og danning og tillit vil vere avgjerande for demokrati og samfunnsdeltaking framover. Aktuelle arbeidspakker inkluderer helse & omsorg, opplæring, media, offentleg sakshandsaming & politiske avgjersler. KI vil endre samfunnet, og det er viktig at alle regionar og sektorar vert inkluderte i denne utviklinga. Eit KI-senter i Møre og Romsdal vil styrke evna samfunnet vårt har til å møte noverande og framtidige utfordringar på ein inkluderande, berekraftig og tillitsvekkande måte.

Partnere og interessenter

"Høgskulen i Volda

Høgskolen i Molde; Norsk innovasjonssenter; Volda kommune"