



AI-Driven INNOVATION in NORWAY



24.11.2025 - Clarion Hotel Energy

The Stavanger AI Laboratory (SAIL), on behalf of the University of Stavanger (UiS), is organizing an event to explore opportunities in Norway for stimulating collaboration and the development of AI in the industry.

In collaboration with key partners, researchers, industry leaders, **20 speakers**, and representatives from the public sector, we invite you to join us and contribute to shaping the future of AI-driven innovation and sustainable development in the region.

PART 1

8:15 - 9:00 Research poster exhibition

9:00 - 9:15 Welcome by Alvaro Fernandez-Quilez, SAIL leader.

9:15 - 10:00 Keynote

Kristinn Rúnar Þórisson "*Transparent & trustworthy machine intelligence: A future Nordic AI vision*".

10:00 - 10:30 Coffee break & research poster exhibition.

10:30 - 12:00 Speakers' presentations:

- AI in Healthcare
- AI in Education, training, and simulation

PART 2

12:00 - 13:00 Lunch

13:00 - 14:30 Speakers' presentations:

- AI in Energy, security, and sustainability
- AI in Social consequences & human factors

14:30 - 14:45 Coffee break

14:45 - 15:45 Panel debate. "*The development of the AI industry in Norway*". **Panelists:** Rialda Spahić (Equinor), Kristinn R. Thórisson (Reykjavik University), Izaskun Muruzábal (Validé), Tom Broekel (UiS), Eva Johannesdottir (Næringsforenigen). **Moderator** Tom Ryen (UiS & chairman at NORA).

15:45 - 16:00 Mingle



Dr. Kristinn R. Thórisson is Professor of Computer Science at Reykjavik University and Director of the Icelandic Institute for Intelligent Machines. During his 30+ years of applied and basic research in AI, Dr. Thórisson has created and taught AI courses at Columbia University, KTH, and Reykjavik U., consulted for NASA, British Telecom, HONDA Research Labs, and numerous AI startups. He has co-founded three AI companies, one of which received funding from Microsoft co-founder Paul Allen and was selected one of the 10 most innovative startups in the US by Reuters Venture Capital in 2003. For the past two decades, Dr. Thórisson and his team at RU have developed a different kind of AI that can learn new tasks from scratch via recursive autonomous self-programming. Dr. Thórisson has been an advisor on AI to the Prime Minister of Iceland and to the Swedish government. He is a three-time recipient of the Kurzweil Award for his work on artificial general intelligence. Dr. Thórisson holds a Ph.D. from MIT.

Note: This event is free of charge. Once registration is confirmed, we will reserve your place and include you in the lunch count. Therefore, if you are unable to attend without prior notice, you may be asked to cover the cost of your meal.



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AI in Healthcare



AI for heart and brain - Biomedical data analysis

Jörn Schulz is an Associate Professor of Statistics at the Institute of Mathematics and Physics (UiS). He completed his PhD at the University of Tromsø, held a postdoc at IDE, and worked at Stavanger University Hospital. His research focuses on statistical shape analysis, geometrical statistics, and data on non-standard spaces, with applications in modeling brain structures from neuroimaging.



Deep learning meets deep brain: AI-powered neuroimaging

Trygve Christian Eftestøl is a Professor in Electrical Engineering with 30 years of experience in biomedical data analysis, particularly in resuscitation and cardiac science. He has supervised PhD projects in digital pathology, newborn resuscitation, sports medicine, neurodegenerative diseases, prostate cancer, and human activity recognition.



Shape Analysis: From Alignment to the Elusive Mean

Morteza holds a Ph.D. in Medical Technology from NTNU, Norway. At BMDLab, he develops advanced MR modalities—including MRSI, PET/MRI, and PET/MRSI—for cancer and brain aging research, while also exploring physics-based and multimodal AI in healthcare. He is a full-time lecturer in Medical Technology at the University of Stavanger.



From Noise to Knowledge: AI-Based Preprocessing, Feature Mining, and Synthetic Data Generation in Resting-State Electroencephalography

Alberto Jaramillo-Jimenez, MD, PhD, is a postdoctoral researcher at the Centre for Age-Related Medicine (SESAM), Stavanger University Hospital, Norway. He specializes in EEG analysis and integrating multimodal biomarkers in dementia research, collaborating internationally to advance early diagnosis and understanding of neurodegenerative diseases.



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AI in Education, Training, and Simulation



Recommender Systems in Literacy Education: Lessons from AI in the Classroom.

Arild Michel Bakken is an Associate Professor at the Norwegian Reading Centre, UiS. With a PhD in Literature focused on reading phenomenology, he now researches adaptive learning technologies and leads interdisciplinary projects on AI-supported reading and writing instruction in schools.



Faster design cycles with scientific ML - applications in wind engineering and aerodynamics.

Knut Erik Teigen Giljarhus is a Professor of Fluid Dynamics and Heat Transfer at the Department of Mechanical and Structural Engineering, UiS. His research spans wind engineering, aerodynamics, complex fluids, and multiphase flow, with a current focus on using machine learning to enhance simulation methods.



AI-Mediated Learning: Exploring Chatbot-Facilitated Student Conversations.

Hege Rangne is an Associate Professor in Educational Science. Research interests include academic language development, professional teacher development, and the integration of artificial intelligence in education.



Language Models in the L1- classroom: What Student Teachers Learn (and Teach Us) through AI.

Margrethe Sønneland is working as an Associate Professor of Norwegian/Literacy at the University of Stavanger. Her research focuses on literature discussions, critical literacy, dialogic teaching, and experimental problem-based approaches in classrooms.



Creative hearts & digital minds: Rethinking Literacy in the Digital Age

Paolo H. Scarbocci is a University Lecturer in Digital Media at the Department of Education & Sports Science, University of Stavanger. He leads the Didaktisk digitalt verksted / Future Classroom Lab in Stavanger and collaborates with schools across Rogaland to promote creative, future-oriented teaching practices and the pedagogical use of emerging digital technologies.



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AI in Social Consequences & Human Factors



Ecosystemic AI: Actors, resources, and the political economy of artificial intelligence

Helle Sjøvaag is professor of journalism at the Department of Media and Social Sciences, and Dean of research at the Faculty of Social Science. Her work revolves around digital infrastructure dependencies and AI integration in media and journalism.



The Missing Catalyst for AGI: Why Simulating Humans Is Essential for Building Human-Like Intelligence

Krisztian Balog is a Professor at the University of Stavanger, where he leads the Information Access & AI (IAI) group, and a Staff Research Scientist at Google DeepMind. His work focuses on assistive AI technologies for information access, and he leads the Language and Personalization work package at NorwAI.



Bridging Law and Technology: Researching legal implications of AI.

Lana Bubalo is an associate professor of law at University of Stavanger School of Business and law. She currently holds the position of head of department and study program director of bachelor and Master of Law programs. She is a member of the research group on AI, ethics and law at Stavanger AI Lab, and is affiliated with the TRUST center for Trustworthy AI led by University of Oslo.



Mapping AI Adoption and Workforce Expectations to Inform Future Education.

Lisa Watson holds a PhD in spatial data analysis from Utrecht University in The Netherlands. Her research interests focus on spatial data for decision making and defining and visualising uncertainty. She has also been active in shaping engineering education, including evaluating work relevance.



The Political Effects of the AI Revolution

Carlo M. Knotz is an associate professor of political science at the University of Stavanger. His research is concerned with the effects of socio-economic transformations such as technological change and immigration on citizens' political attitudes and preferences.



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Lesson in Building AI Agents: Creating Business Value without Losing Human Touch.

Peyman Kor is an AI & Data Engineering Consultant at Antire AS and a PhD Fellow in AI at the University of Stavanger. His work bridges research and industry, focusing on how AI can complement human decision maker in making better decisions. Peyman has involved on projects on building AI Agent that provide context to human, emphasizing human-AI collaboration and real-world value creation.

AI in Energy, Security, and Sustainability



Bridging Scales with AI: From Molecular Modeling to Energy-System Decisions.

Auref Rostamian is a Fellow Researcher at the University of Stavanger, working on decision analysis, reservoir development, and data assimilation. His research focuses on integrating artificial intelligence with physics-based models to improve decision-making and uncertainty management in complex energy systems.



Faster design cycles with scientific ML - applications in wind engineering and aerodynamics.

Professor Chunming Rong specializes in secure distributed computing at the University of Stavanger and NORCE Research. He is Editor-in-Chief of Springer's Journal of Cloud Computing and co-Editor-in-Chief of Elsevier's Blockchain: Research and Applications. As chair of Blockchain in the IEEE Computer Society and co-founder of OpenIaC.org, he fosters innovation in tokenized assets and contributes foundational frameworks to EU and Norwegian projects.



Artificial Intelligence in Future Communication Technologies.

Gianfranco Nencioni is an associate professor in Computer Science at the University of Stavanger. He is leading the Computer Networks (ComNet) research group and was the principal investigator of the NFR-funded 5G-MODaNel project.



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AI in Energy, security, and sustainability



AI-Enhanced Microservice Framework for Real-Time Drilling Performance Monitoring with LLM Integration.

Hamed Sahebi is a software and data engineer specializing in AI-driven drilling automation and microservice-based systems. At the University of Stavanger, he led the development of real-time drilling monitoring and predictive analytics tools. His research integrates microservices, generative AI, digital twins, and machine learning for adaptive drilling operations.



Applications of Artificial Intelligence in Road Tunnel Safety.

Dr. Naeem Khademi is an Associate Professor of Computer Science at the University of Stavanger. From 2019 to 2024, he contributed to the NFR-funded FORREGION KATS project and led the ICT-based Tunnel Safety Research Group, focusing on AI applications in road tunnel safety.



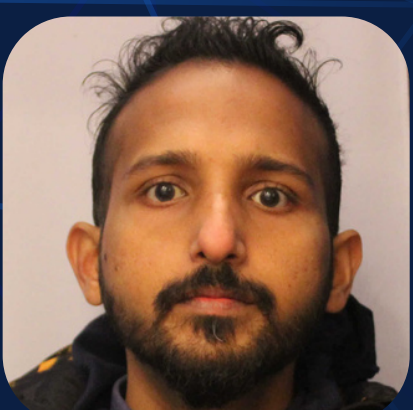
AI in the Service of Maintaining Reliable Systems.

Leander Jehl is an Associate Professor at the University of Stavanger and a member of the Reliable Systems Lab (RELAB) research group. His research focuses on distributed and decentralized systems, spanning algorithms, formal methods, economic incentive mechanisms, and practical implementation and evaluation.



AI for Advanced Power System Operations.

Dr. Merkebu Zenebe Degefa is an Associate Professor in Electrical Power Systems at the University of Stavanger. He has led national and international projects on Active Power Distribution Networks, specializing in advanced operational functions. His research also applies AI to improve power system security, efficiency, and access to electricity.



AI-Enhanced Techno-Economic Evaluation of Micro Gas Turbines-Based Energy Systems.

A. H. Samitha Weerakoon is a Ph.D. candidate at the University of Stavanger under the EU Horizon 2020 NextMGT project. His research focuses on techno-economic analysis, energy system modeling, hydrogen-integrated energy technologies and microgrids.



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The Development of AI in Norway

-Panel debate-

Artificial Intelligence is moving fast from promise to practice, transforming industries and shaping The future of work, sustainability, and competitiveness. For Norway, building a strong AI industry is about more than technology: it's about unlocking new value across society and ensuring global relevance in a rapidly evolving world. Stavanger, long recognized as Norway's energy capital, offers unique possibilities for this discussion. With its legacy of innovation in oil, gas, and renewables, the region is well positioned to bridge the country's traditional strengths with the emerging opportunities of the AI age. This panel will explore how Norway can nurture its AI industry and what role hubs like Stavanger can play in leading that journey

Participants



Rialda Spahić has a doctorate in Engineering Cybernetics from the Norwegian University of Science and Technology where she researched risk-informed artificial intelligence. She is currently leading Responsible AI at Equinor focusing on risk analyses, international standards, legal requirements, and technological application to ensure AI alignment with ethical principles and societal norms that foster trust and prioritize AI system safety. Rialda is also a founder of Women in AI Norway with volunteers across major Norwegian cities, and a member of ethics committee for Norwegian AI Cloud.



Dr. Kristinn R. Thórisson is Professor of Computer Science at Reykjavik University and Director of the Icelandic Institute for Intelligent Machines. He has co-founded three AI companies, one of which received funding from Microsoft co-founder Paul Allen and was selected one of the 10 most innovative startups in the US by Reuters Venture Capital in 2003. Thórisson has been an advisor on AI to the Prime Minister of Iceland and to the Swedish government.



Izaskun Muruzábal is Business Development Manager at Validé, the regional innovation company and technology transfer office for the University of Stavanger. She works with research-based innovation, start-up incubation, and commercialization of new technologies, with a focus on health, IT, and biotech. At Validé, she leads projects funded by the Research Council of Norway and manages the IP portfolio. Through her role, she collaborates closely with researchers, students, and industry to bring forward new solutions, including those within digital technologies and AI-driven innovation.



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Participants



Professor Tom Broekel is an economist and economic geographer whose research explores regional development, innovation, and technological change. He draws on large-scale data, including patents, news, and job advertisements, to understand how locations evolve and adapt over time. He earned his doctoral degree at the Friedrich Schiller University Jena and his habilitation at Leibniz University Hannover and has since held positions at Utrecht University and the University of Stavanger, where he is currently based. His research is widely cited internationally, and he is a frequent speaker on the opportunities and challenges of applying AI in higher education.



Eva Johannesdottir, Regional Director at Webstep. Eva is passionate about working at the intersection of people and technology. She has been a tech enthusiast since the 2000s and has extensive leadership experience in the IT industry, focusing on building strong professional communities and sustainable growth. Her engagement also extends beyond Webstep, serving as a board member of the Oda Network and leader of Oda Mentor, as well as a member of the advisory board for digitalization in the Chamber of Commerce.

Moderator



Tom Ryen has been the Head of the Department of Electrical and Computer Engineering at the University of Stavanger (UiS) since 2016. He holds a Ph.D. in digital signal processing. Since 2002, he has served as an Associate Professor in Computer Engineering at UiS, except for the year 2013, when he worked as a researcher at SINTEF. In addition to his role as department head, he was actively involved in establishing the Stavanger AI Lab, which focuses on research, innovation, and education in artificial intelligence. Tom Ryen is also the Chair of the Board at NORA.ai (Norwegian Artificial Intelligence Research Consortium).