

RISE Computer Science and **AI Open House**

14 September 2023



Programme

THURSDAY 14 SEPTEMBER

Electrum, floor 2. Keynote presentations 09:30-12:00.

Moderator: Jeanette Nilsson, AI ECO Systems Driver, RISE

- **09.30** Registration and coffee
- **10.00** Welcome and introduction Hanifeh Khayyeri, Vice President of Computer Science at RISE
- **10.10 KEYNOTE:**
 - Game Changers: Exploring the Intersection of AI and Games Sahar Asadi, Director of AI labs, King
- 10.40 **KEYNOTE: Title to be announced** Ed Chi, Distinguished Scientist at Google DeepMind
- **11.10** Short break
- 11.15 KEYNOTE:
 - **Crafting Realities: The Future of Generative AI with Henry Tirri** Henry Tirri, CTO of SiloGen, Silo Al's LLM & product subsidiary. Moderator: Stella Riad, RISE
- **11.50** Taking the lead of AI for a sustainable future Jeanette Nilsson, AI Eco Systems Driver at RISE

RISE, floor 6. Presentations and parallell poster and demo session.

Moderator: Jeanette Nilsson, AI ECO Systems Driver, RISE

- **12.00** Lunch, mingle. Poster and demo session open 12.00-16.00.
- **13.00** Research presentations:

13.00 Environmental analysis powered by AI

Olof Mogren, Research Director of Deep learning at RISE

13.30 The ever-increasing capacity of generative AI

Fredrik Carlsson, Researcher, RISE

14.00 Preparing for cyberattacks – from research to cyber training and exercises *Shahid Raza, Director of the Cybersecurity Unit at RISE*

15.15 Panel discussion: How close are we to Artificial General Intelligence

Special guest: Jörgen Gustafsson, head of AI Research at Ericsson. Moderators: Jeanette Nilsson and Olof Mogren, RISE

This panel will discuss how close we are to Artifical General Intelligence and its impact on society and technology development from different perspectives, including AI, digitalisaton, cyber security and more.

16.00 Mingle and snacks

This programme is subject to change until the event. Updated 2023-08-29 $\,$

Speakers



Hanifeh Khayyeri, RISE

Hanifeh Khayyeri is the Vice President of Computer Science at RISE, a state-owned research institute in Sweden with expertise in all areas of applied sciences and industrial sectors. Hanifeh leads a department of more than 100 researchers in areas such as AI, Cybersecurity, IoT and Infrastructure. She holds a PhD in Computational Bioengineering from Trinity College Dublin and has more than 15 years of research experience. Hanifeh has in-depth experience in research and innovation policy, primarily large-scale international research infrastructures, and is also an appointed expert for the European Commission and the Swedish Government. Her spare time is mostly spent on issues relating to human rights, particularly the rights of women.

Sahar Asadi, AI Labs at King

Sahar Asadi is the Director of the AI Labs at King, where she leads AI research for mobile games. She has over 11 years of experience conducting applied research in various domains such as user understanding, distributed deep learning, information retrieval, NLP, and product recognition. Her research interests are focused on the scalability and generalization of learning methods, human-in-the-loop content generation, reinforcement learning for game playtesting, recommender systems, and responsible AI. Sahar holds a Ph.D. in Applied Autonomous Sensor Systems from Örebro University and is a co-founder of Women in Data Science, AI & ML Sweden. She actively collaborates with academic research groups and the WASP WARA community and contributes to the scientific community as an author, speaker, reviewer, and conference organizer.





Ed. H. Chi, Google DeepMind

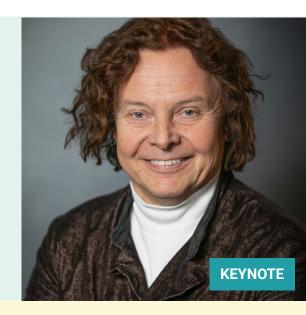
Ed H. Chi is a Distinguished Scientist at Google DeepMind, leading machine learning research teams working on large language models (LaMDA/Bard), neural recommendations, and reliable machine learning. With 39 patents and ~200 research articles, he is also known for research on user behavior in web and social media. As the Research Platform Lead, he helped launch Bard, a conversational AI experiment, and delivered significant improvements for YouTube, News, Ads, Google Play Store at Google with >660 product improvements since 2013.

Prior to Google, he was Area Manager and Principal Scientist at Xerox Palo Alto Research Center's Augmented Social Cognition Group in researching how social computing systems help groups of people to remember, think and reason. Ed earned his 3 degrees (B.S., M.S., and Ph.D.) in 6.5 years from University of Minnesota. Inducted as an ACM Fellow and into the CHI Academy, he also received a 20-year Test of Time award for research in information visualization. He has been featured and quoted in the press, including the Economist, Time Magazine, LA Times, and the Associated Press.

Henry Tirri, CTO of SiloGen

Henry Tirri, CTO of SiloGen, Silo AI's LLM & product subsidiary, is a technology executive and a visionary, recognized for his deep expertise in AI, machine learning and data analytics. During his 25+ years within the technology and communications sectors, Henry has held positions such as CTO and EVP at Nokia, CTO at Samsung HARMAN, and CTO and EVP at Interdigital. He has led advancements in telecom, video, AI, and emerging technologies across North America, Europe, and Asia.

His academic career includes a tenured professorship in computer science at the University of Helsinki and Stanford University, as well as an Adjunct Professorship in civil engineering at the University of California, Berkeley. He graduated from the University of Helsinki with a PhD in computer science.





Stella Riad, RISE

Stella Riad is Director of Data Analysis at the Computer Science department at RISE. She has a PhD in Theoretical Particle Physics from KTH Royal Institute of Technology and has more than five years' experience performing and leading research in the MedTech sector.

Jeanette Nilsson, RISE

Jeanette Nilsson has an engineering degree from Luleå University of Technology and has worked with business development on a national, regional and local basis. She has close to five years of experience from working with lobbying in Brussels. Currently, she works at RISE as an AI Ecosystem expert with the goal of making Sweden a leading European nation when it comes to using artificial intelligence technology to strengthen societal development. Jeanette is also active in the HPC community and part of the group that is developing the Swedish HPC center with the responsibility of connecting industry and SME. She is a board member of BDVA and a member of the RIAG (Research Innovation Advisory Group) to the Euro HPC JU.





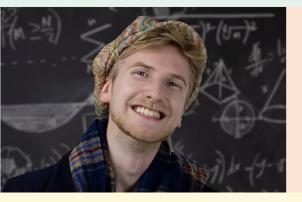
Jörgen Gustafsson, Ericsson

Jörgen Gustafsson is head of Ericsson's AI Research, leading research teams working on reinforcement learning, deep learning, trustworthy AI, generative AI, distributed intelligence, and other AI topics. The research ranges from long-term collaboration with top universities to transfer of AI technology to Ericsson's products and services. Jörgen has experience from several Swedish national research projects together with academia and other industry companies. Jörgen is co-rapporteur of a group within ITU-T Study Group 12. He is an inventor of many patents and has a M.Sc. in computer science from Linköping University.

Olof Mogren, RISE

Olof Mogren is the Research Director of Deep learning within the RISE Center for Applied AI Reserch. His work includes federated learning, privacy-preserving representation learning, and generative adversarial networks for multiple data modalities, including images, sound, natural language, and other types of sensor inputs. His recent work includes applied research related to soundscape analysis and computer vision for biodiversity monitoring, efficient and distributed machine learning, uncertainty quantification, predictive maintenance of district heating networks, and smart fire detection using machine listening.





Fredrik Carlsson, RISE

Fredrik Carlsson is a RISE employed Algorithmic Artificial Intelligence Researcher. Fredrik is specialized in transformer architectures, which are the basis for groundbreaking inventions such as ChatGPT and GPT-4. Fredrik has been working with language models (before they were large), and is currently focusing on improving the data efficiency of GPT-like models. Alongside this research track, Fredrik has been part of an ongoing RISE initiative to educate and raise awareness of Al in society.

Shahid Raza, RISE

Professor Shahid Raza is the Director of the Cybersecurity Unit at RISE, where he has been working since 2008 and currently leading a team of highly qualified cybersecurity experts. Shahid has envisioned and founded the RISE Cyber Range and the Swedish Cybersecurity Research and Innovation Node (cybernode.se) and leads these initiatives. He has also co-founded Cybercampus Sweden. (cybercampus.se)

Shahid is an expert cybersecurity researcher; his scientific work is published in prestigious journals and conferences, which have received over 6000 citations. Shahid holds a PhD and a Master of Science degree, both in cybersecurity. (http://shahidraza.net)

