Excellence Center at Linköping – Lund in Information Technology

NEWSLETTER 27

December 2025

Greetings from the Directors

2025 has been another prosperous year for ELLIIT. Two new recruited faculty have joined, 24 projects within calls B and C finish this December, and 51 new PhD students within calls F and G will start next year. Two focus periods were concluded during 2025, and next year we look forward to three: in April on Wireless Sensing (at LiU) and Optimization for Learning (at LU), and in fall on Robust AI (at Halmstad University). We thank everyone for your contributions to making ELLIIT a success.

Merry Christmas and A Happy New Year!

Erik G. Larsson, director Fredrik Tufvesson, co-director

Surrounded by roboticists

ELLIIT Focus Period Fall 2025: Robot Learning

The focus period on Robot Learning took place in Lund from November 3 to December 5. The focus period symposium was organized November 18-20. It gathered top researchers in their subjects, sharing insights with visiting scholars, and symposium attendees for three intense days.

More on the symposium

- > Find the symposium program and presentation slides by the invited speakers
- > See the visiting scholar seminar series program and presentation slides
- > See a short clip about the focus period



ELLIIT focus period fall 2025 symposium attendees. Photo: Susanna Lönnqvist

ELLIIT Focus Periods Spring 2026: Linköping & Lund

In spring 2026, two focus periods will be organized, one in Linköping and one in Lund.

The topic for the Linköping focus period is **Wireless Sensing Technologies for Emerging Applications** and takes place April 7-May 8. The three day symposium is April 21-23.

The Lund focus period is on **Optimization for Learning**, and takes place April 20-May 22. The symposium is May 6-8.

ELLIIT Focus Period Fall 2026: Halmstad

For the first time, in fall 2026 Halmstad University will be hosting a focus period. The topic is Robust AI for Science and Industry.

The focus period takes place September 7 - October 9, 2026 with a symposium September 22-24.

ELLIIT Annual Workshop

The annual ELLIIT Workshop 2025 took take place in Norrköping, on October 21-22.

Program chair was Ingrid Hotz, together with co-chairs Jonas Unger and Ehsan Miandji.

See a clip covering the workshop on LinkedIn

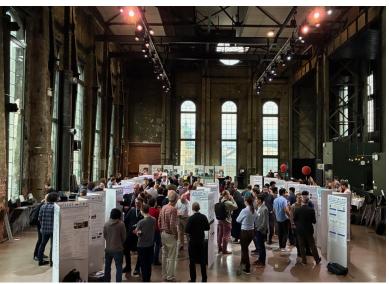






Photo: Simon Höckerbo

Save the date!

Industry Forum

ELLIIT Breakfast with the Industry Forum will take place February 3, 2026 in Linköping, at the research arena Visionen.

Program and registration >>

Annual Workshop

The annual ELLIIT Workshop 2026 will take place in Lund, October 21-22. Info and agenda to be updated.

News

31 PhD students funded by Call F In total 31 new PhD positions will be supported to run 2026-2030, with a total budget of SEK 155 million.

ELLIIT Call F

20 PhD students funded by Call G

Call G will fund a total of 20 new PhD students with projects running from 2026 to 2030. The initiative represents an investment of SEK 20 million per year over five years.

ELLIIT Call G

Gender & Diversity Projects 2025

Five projects have received funding in the open call for Gender and diversity projects autumn 2025:

To the Gender & Diversity Group page

Students built their own chips



Organizer Oscar Gustafsson at the event. Photo: Magnus Johansson.

In a workshop supported by the Gender & Diversity initiative of ELLIIT, students at LiU got to build their own chips, and get a practical insight into semiconductor technologies.

Find out more

See a clip from the event (in Swedish)

Awards & Appointments

Wallenberg Academy Fellow

ELLIIT recruited faculty member Zheng Chen (LiU) has been appointed Wallenberg Academy Fellow, securing five years of funding to tackle challenging research questions.

Read LiU's article on Zheng Chen's appointment and research focus

Zheng Chen has also been elected as new member of the IEEE Signal Processing Society SPCOM technical committee. The committee "is dedicated to exploring and illuminating the connections between the rapidly growing research fields within the larger IEEE organization."

VR Grants

Emma Tegling (LU) has received a starting grant from Vetenskapsrådet (VR). It is an individual grant to establish independent research in Sweden, and spans four years.

More on WASP's homepage

Khac-Hoang Ngo (LiU), Krzysztof Bartoszek (LiU) and Amir Aminifar (LU) have received four year project grants from Vetenskapsrådet:

Khac-Hoang Ngo: Memory Poisoning in LLM Agents.

Krzysztof Bartoszek: Improving Phylogenetic Comparative Methods.

Amir Aminifar: Reliable Federated Learning.

Fellow of the Royal Swedish Academy of Engineering Sciences

ELLIIT director Erik G. Larsson has been elected fellow of the Royal Swedish Academy of Engineering Sciences. The academy is one of the esteemed royal academies in Sweden, and was founded in 1919. In Swedish, Kungliga Ingenjörsvetenskapsakademien, shortened IVA.

Clarivate Highly Cited Researchers of 2025

Erik G. Larsson is on the Clarivate ISI/Web of Science list over highly cited researchers of 2025.

Each researcher selected has authored multiple highly cited papers which rank in the top 1% by citations for their field(s) and publication year in the Web of Science Core Collection over the past eleven years.

Explore the listing here >>

Best Paper Award



Sijia Cheng, Liang Liu, Ove Edfors and Juan Vidal Alegría received best paper award at the 38th IEEE Workshop on Signal Processing Systems (SiPS) in Hongkong this November, for their work titled:

Highly Parallel Singular Value Decomposition for Low-Latency MIMO Processing

Michael Felsberg (LiU) was invited keynote speaker at NeurIPS (Neural Information Processing Systems) **Learning to Sense Workshop** December 7, 2025. His opening keynote was titled: Learning in Low-Level Vision.

Outreach

Open-Source Software

The outreach page on elliit.se now features open source software, that ELLIIT researchers have contributed to developing.

Go to the ELLIIT outreach page

Sven Berggren Award Presentation



Anders Ynnerman received the 2025 Sven Berggren award from Kungliga Fysiografiska Sällskapet in Lund. See the recording of the awardee presentation on October 8th (lecture in Swedish). The presentation is also linked from the ELLIIT outreach page.

To the society's homepage, and more lectures

ELLIIT LinkedIn

ELLIIT's LinkedIn page is now live, with first posts from the annual workshop in Norrköping. Follow and tag @elliit

Linkedin

Dissertations

Md Fahim Sikder >> Representative Synthetic Data for Fair Decision Making. Defense: 16/1 2026, 09:15. Ada Lovelace, B-building, LiU.

Eduardo Kochenborger Duarte
>> Ethical Systems for Emergency
Vehicle Coordination and Autonomous
Safety

Arman Mohammadi
>> Machine Learning for Fault Diagnosis
of Industrial Systems

Donglin Liu >> System Identification and Data-Driven Modeling

Pex Tufvesson >> Real-Time Brain-Computer Interfaces

Masoud Nouripayam
>> Near-Memory Computing
Architectures for Scalable Edge AI
Applications

Arturo Prieto
>> 3D Integration Technology and NearMemory Computing for Edge AI

Sidra Muneer >> Lic: Handling nonlinear power amplifiers in massive MIMO: systemlevel tradeoffs

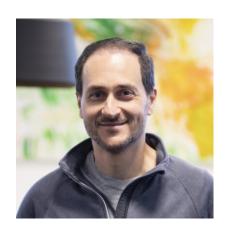
Meet the Recruited Faculty



Farnaz Adib Yaghmaie

How can learning-based methods be used to control complex systems in challenging and unpredictable environments? This is something that Farnaz Adib Yaghmaie is exploring. We spoke with her about this and several initiatives, including the new research center SEDDIT.

Meet Farnaz Adib Yaghmaie >>



Edison Pignaton de Freitas

Being listed as one of the world's 2% most relevant scientists by Stanford University two years in a row makes Edison Pignaton de Freitas a great addition to the Recruited Faculty. We spoke with him about networked robotics systems, his work within the Brazilian Army, and his ambitions to create fruitful collaborations within the ELLIIT network.

Meet Edison Pignaton de Freitas >>

Did you know...

...that all ELLIIT projects, past and present, are listed in the project catalogue on elliit.se?

See them here!

