ELLIIT
Excellence Center at Linköping – Lund in Information Technology

NEWSLETTER 28

February 2026

Wireless Sensing Technologies for Emerging Applications

ELLIIT Focus Period Spring Term 2026 Linköping

The ELLIIT focus period organized in Linköping in the spring term is focused on wireless sensing technologies, and the vast number of applications that will emerge in the near future. The focus period will deep dive into questions like: What novel applications and evolving requirements are driving the advancement of radar and communication systems? What are the strategic advantages and inherent challenges in the integration of communication and radar systems?

The focus period takes place in at Linköping University April 7 to May 8, with the three day symposium April 21-23, 2026.

More on the focus period

> See symposium program & sign up

> See invited speakers

> Meet the visiting scholars

> Meet focus period organizer Diana Pamela Moya Osorio in the "Meet the recruited faculty" series

In 2026, there will be three ELLIIT focus periods! In Halmstad in fall term, the topic will be **Robust AI for Science and Industry.**

September 7 - October 9, symposium September 22-24, 2026

Optimization problems can be visualized as mountain ridges. Image: Erik Tanghe/Pixabay

Optimization for Learning

ELLIIT Focus Period Spring Term 2026 Lund

The topic of the focus period organized in Lund in spring is optimization for learning. The focus period takes place April 20 to May 22, with the symposium arranged May 6-8, 2026.

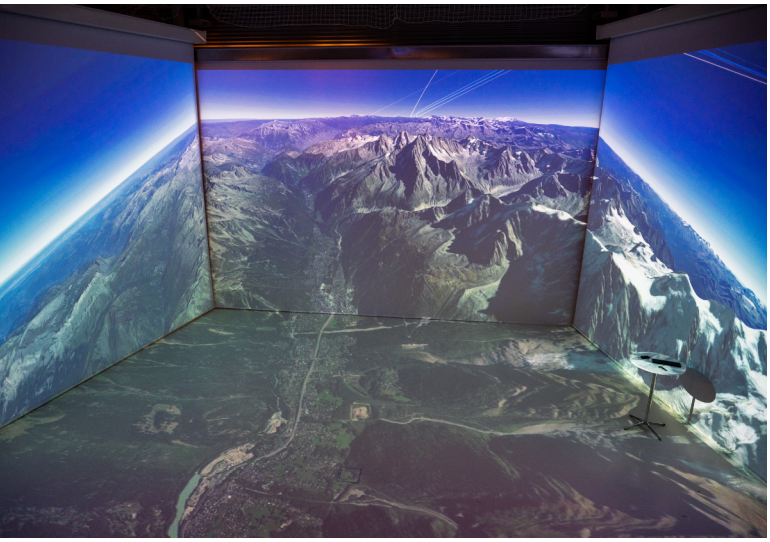
Read more on the topic and the thoughts of the organizers:

Optimizing your next prediction

> See the invited speakers

> Sign up for the symposium

> Meet the visiting scholars



The ELLIIT infrastructure Visionen in Linköping. Photo: Simon Höckerbo.

Academia + Industry = Breakfast with the Industry Forum

For the second time, ELLIIT organized an event called Breakfast with the Industry Forum. It gathered researchers and industry partners in Visionen at Linköping University, to strengthen ties between academia and the industry.

More on the event

Save the date!

Annual Workshop

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

News

On digital sovereignty

Johan Linåker (LU) has written a piece on digital and data sovereignty in Europe, and the path forward for The Conversation UK. The Conversation is a media outlet that publishes news and research reports written by academics, and has wide spread international reach.

Europe wants to end its dangerous reliance on US internet technology

More on the topic from Lund University Press:

How to make the EU more digitally independent

Screenshot from theconversation.com, image of Helsingborg: Collection Maykova/Shutterstock

AI for earlier detection of chronic obstructive pulmonary disease

Alper Idrisoglu (BTH) has been featured in Svenska Dagbladet in an interview on his work with machine learning for early disease detection. Studies indicate that 70-80 percent of people with COPD are undiagnosed, and the analysis of the sounding of the vowel a was shown to function as a digital biomarker with high detection rates. Article in SvD in Swedish:

Forskning: 350 000 har KOL ovetandes i Sverige

Earlier publication:
Alper Idrisoglu, Ana Luiza Dallora Moraes, Abbas Cheddad, Peter Anderberg, Andreas Jakobsson, Johan Sanmartin Berglund.

Vowel segmentation impact on machine learning classification for chronic obstructive pulmonary disease.

Scientific Reports 15, 9930 (2025) >>

From chance meeting to international internship

PhD student Michail Boulasikis (LU) completed an internship at RIKEN Center for Computational Science in Japan, the country's largest research institute. He connected with researcher Theresa Pollinger at the IPDPS 2025 (International Parallell and Distributed Processing Symposium) in Milan in June 2025. The ELLIIT GPAI (General Purpose AI Computing) project had identified arithmetic precision as a major barrier to using AI accelerators for general-purpose tasks. Theresa introduced Michail to a promising solution: the Ozaki Scheme, which emulates high-precision matrix multiplication using low-precision arithmetic. Recognizing the opportunity, Michail reached out to Jens Domke, an AI hardware expert at RIKEN who works closely with the Ozaki Scheme's creators.

The resulting internship allowed Michail to work directly with the technique's developers and explore how it could solve GPAI's precision challenges. During his time at RIKEN, he successfully extended the Ozaki Scheme for stencil applications, work that continues today. The collaborative research is now being prepared for submission to a conference, demonstrating how ELLIIT's support for international exchanges creates lasting research partnerships and advances the organization's strategic goals in AI and computing.

Michail Boulasikis in Kobe.

What? Outreach activity and internship for PhD student Michail Boulasikis in ELLIIT project **GPAI - General Purpose AI Computing.**

When? October 15 - December 16, 2025

Where? RIKEN R-CCS in Kobe, Japan

Awards & Appointments

100 Brilliant and Inspiring Women in 6G List 2026

Diana Pamela Moya Osorio (LiU) has been named to the 100 Brilliant and Inspiring Women in 6G List for 2026.

The listing is presented for the third year in a row by the "Women in 6G" initiative. The community works for closing the gender gap and diversifying the telecom field.

See the listing here >>

Håkan Johansson (LiU) has been appointed Associated Editor of **IEEE Circuits and Systems Magazine >>**

Dissertations

Erik Tegler
>> From Sound to Structure: Robust Localization of Sources, Sensors, and Surroundings

Filip Ekström Kelvinius
>> Deep Learning for the Atomic Scale: Graph Neural Networks and Deep Generative Models with Some Applications to Materials and Molecules

Luca Lebon
>> Geometric Control Problems over Networks (Lic)

Niloofar Momeni
Reliable AI for Parkinson's Disease Detection Using Voice Data (Lic)

Meet the Recruited Faculty

Fredrik Lindsten

Recently appointed as Professor at Linköping University, Fredrik Lindsten is one of the university's leading experts in AI technology and machine learning. We spoke to him about organizing focus periods, machine learning in weather forecasting, and his ambitions within ELLIIT.

Meet Fredrik Lindsten >>

Michael Lentmaier

Imagine you are in a room full of people, and everybody is talking. Even if you cannot clearly hear every word of a conversation, you can still grasp and understand the topic. This is error correction on the fly, something that we humans naturally do with help of the redundancy that is embedded in our language. We spoke to Michael Lentmaier about his field of research, error correcting codes or channel coding, the technique that detects and corrects errors whenever electronic devices transmit or store data.

Meet Michael Lentmaier >>

Remember...

ELLIIT on LinkedIn

Follow and **tag @elliit** on LinkedIn, especially ELLIIT funded position ads, for repost from ELLIIT's account!