

santa anna

Looking for a passionate research partner?

We proudly present Santa Anna IT Research Institute AB

Digitalization for a sustainable future

A Swedish Research Institute with a focus on AI and Simulation,
committed to support society's digital transfer



Santa Anna IT Research Institute

santa-anna.se

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Santa Anna IT Research Institute was first founded in 1999 through the KK-stiftelsen establishment and by an initiative from Sture Hägglund at Dept of Computer Science at Linköping University. It was later transformed into SICS and into RISE, recently re-started.

In the belief that Swedish Research can benefit even more from a small flexible, non-governmental, non bound, non profit and closely working institute partner, Santa Anna has been restored and restarted – taking the best that was, but shaped into a modern institute ready to work for a sustainable future!

Santa Anna provides applied IT research within strategic areas tied to the rapid and accelerating AI development, attracting the best of competences available.

The NGO association OSMC is the owner of Santa Anna, and Prof. Peter Fritzson, vice director of OSMC, took initiative to the re-started institute. Moreover, co-founder and among the first employees of the new Santa Anna is Prof Sture Hägglund

AI @ ❤️

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Owned (100%)

Open Source Modelica Consortium at Linköping University

Situated

Linköping University, Campus Valla, Building B

Members of the board

Peter Fritzson (chairman & deputy CEO), professor at LIU (ida)

Ulf Nilsson, professor at LIU, former Dean of LIU Technical Faculty

Johan Ölvander, Dean of LIU Technical Faculty

Niclas Fock (CEO)

Santa Anna is one of the hosting organisations of AI Sweden



FOCUS AREAS/LABORATORIES

Simulation

- Software and Cyber-Physical System Engineering, AI, Simulation, Analysis

AI for Research

- Applied AI, supporting other fields of research at Swedish universities

Forensics

- AI for Digital Forensics

Ethics and Training

- Training in ethical and applied AI

Healthcare

- Digital Information Services for Life Science



Examples of services provided by Santa Anna:

- *Qualified and practical knowledge transfer of university research to social actors*
- *Implementations of AI in systems, prototypes, digital twins and demonstrators, etc*
- *Implementation of algorithms and development of systems for Autonomous vehicles and drone systems, digital forensics and modeling of cyber-physical systems*
- *Provide unique international expert and research services at short notice and for short periods*
- *Arrangement of qualified researcher events, research schools, international exchange programs etc. including qualified research engineering services in connection with such arrangements*
- *Consulting and development of policies and regulations for autonomous vehicles and drone systems, digital forensics and modeling of cyber-physical systems*
- *Data collection with qualified sensor systems*



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PROJECTS - Activities and Collaborations related to Integration of Modelica Modeling, Simulation and Machine Learning

New ELLIIT funded project, PhD student started at LiU September 2021, studying modeling, cloud-based simulation and machine learning

(Adrian Pop, principal investigator)

Collaboration start phase with Fredrik Heinz, LIU on integration of modeling, simulation and Machine learning

(Fredrik Heintz (Assoc prof, AI), Adrian Pop, Peter Fritzson)

Collaboration with OSMC partners in German PhyMos project on hybrid (data- and physics-based modeling approaches) integration of equation-based physical modeling and data-driven machine learning models

ITEA4 European project OpenSCALING - “Open standards for Scalable Virtual Engineering and Operation”, 26 partners, 3 years 2023-2026. For large-scale modeling, integration of equation-based modeling and AI machine-learning technology.

Santa Anna provides services to Swedens largest Research Program ever, WASP (Wallenberg AI and Autonomous Systems and Software Program)

(Niclas Fock, WASP WARA Director)

Work for Region Östergötland and National Forensics Centre (NFC), leading the national initiative for Digital Forensics (Digital Forensics Sweden, <https://www.digital-forensics.se>)

(Lena klasén, Adj Professor at LiU/isy, working for Santa Anna)

