



## Webinar on AI applications to manufacturing and process control

### Goal and expected impact

Within the Wallenberg AI, Autonomous Systems and Software Program (WASP), the cluster for manufacturing and process control identified the opportunity for facilitating the discussions on AI applications in manufacturing and process control, which is crucial for the Swedish industry's competitiveness. This WASP cluster will host a webinar to provide Swedish industry and academia with an arena to discuss AI applications in manufacturing and process control. Through the discussions, we expect to enhance common knowledge and exchange experience about the challenges and possible solutions for AI applications in manufacturing and process control, further developing the future activities of the topic in Sweden. The expected impact includes:

- Increased knowledge of cutting-edge research on AI applications to manufacturing and process control that is carried out as collaboration between manufacturers and universities in Sweden.
- Greater understanding of challenges in practice of manufacturing and process control in Sweden that AI research could tackle.
- Enhanced industry-academia network and collaboration opportunities in Sweden.

### Target audience

Those who are involved in production process management, quality management, product design, operation services, or logistics in Sweden. Those interested in learning example research works on AI application to production related tasks and, more holistically, to value chains or product lifecycles.

### When and where

September 7th, 2023. MS Teams link to be sent to the registered participants.

### Language

English

### Agenda

- 14:00-14:10 Intro + presentation of participants
- 14:10-14:55 Three 10-minute presentations of research projects, followed by QAs
  - Automatic quality inspection based on Computer Vision by Xiaomeng (Mandy) Zhu (KTH)
  - Learning Planning Domains for Intelligent Transport Systems by Simona Gugliermo (Örebro U)
  - How AI can contribute to environmental sustainability? by Tom Sakao (Linköping U)
- 14:55-15:40 open discussion on challenges for AI applications in manufacturing and process control in Swedish industry - Each participant from industry is welcome to state their challenges / needs.
- 15:40-15:50 Summary and ways forward

### Cost

Free of charge for the registered participants.

### Organizer

Co-leaders of the WASP cluster for manufacturing and process control: Atsuto Maki, KTH and Tom Sakao, LiU

### Registration and contact

Email your name, affiliation, & email address to Prof. Tom Sakao **no later than August 23**:

[tomohiko.sakao@liu.se](mailto:tomohiko.sakao@liu.se), 073 620 9472.

WASP is Sweden's largest individual research program ever, and provides unique opportunities for achieving international research excellence with industrial relevance; funded by the Knut and Alice Wallenberg Foundation. <https://wasp-sweden.org>

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AUTONOMOUS SYSTEMS  
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