



WASP

WALLENBERG AI,  
AUTONOMOUS SYSTEMS  
AND SOFTWARE PROGRAM





# Industrial PhD Webinar 2022

- **13:15 Introduction**  
Anders Ynnerman, WASP Program Director
- **13:30 General presentation about WASP Industrial PhD Student program**  
Karl-Erik Årzén, Lund University, Danica Kragic, KTH Royal Institute of Technology
- **13:55 WASP Graduate School**  
Fredrik Heintz, WASP Graduate School Director
- **14:15 Perspectives from industry**  
Arvi Jonnarth, industrial PhD student, Adam Tengblad, industrial supervisor at Husqvarna
- **14:45 Questions and discussion**
- **15:00 Wrap up**

# WASP

## Vision

Excellent research and competence in artificial intelligence, autonomous systems and software for the benefit of Swedish industry.

## Mission

Build a world leading platform for academic research that interacts with leading companies in Sweden to develop knowledge and competence for the future.



5.5 billion SEK for 15 years  
till 2030

- KAW 4.2 billion SEK
- Universities/ Industry 1.3 billion SEK

Target Goals:

- 600 PhDs
- 80 new research groups
- Recruitment of leading international researchers

# WASP 2030 - Narrative and Strategy

- **Vision Mission Status**
- **Situation Analysis and Outlook**
- **WASP Wanted Positions 2029**
- **Current WASP Instruments**
- **Strategy Instrument Analysis**
- **Proposed New Instruments and Initiatives**
- **WASP Beyond 2030**





# WASP Instruments

**RESEARCH PROGRAM**

**GRADUATE SCHOOL**

**RECRUITMENT**

**RESEARCH ARENAS**

**INTERNATIONALIZATION**

**COMMUNICATION EVENTS NETWORKING**



# WASP Status 2021

- Recruitment of 11 professors in autonomous systems and software.
- Top-level recruitment of Wallenberg Chairs, now nine in total (4 guest professors)
- Recruitment of assistant/associate professors in AI, now 26 in total
- Growth of Graduate School, now with 364 active PhDs students, 104 industrial PhD students. (33 have defended)
- 58 companies engaged in WASP





# Highlights 2021



# Unified Graduate School

*The mission of the WASP Graduate School is to educate PhDs with skills in **strategically important disciplines** within WASP, together with a **broad knowledge of AI, autonomous systems and software development**.*

- Educate 600+ PhDs (incl. 150+ industrial PhDs)
- Unique courses in AI, autonomous systems, software and mathematics for AI
- International study trips, summer schools, and semester abroad
- Networking with fellow students, academic researchers globally, and Swedish industry

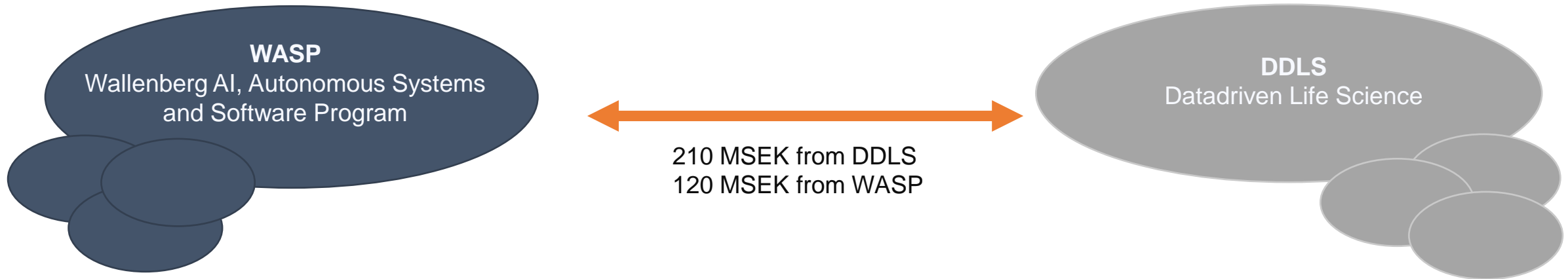


# WASP NESTs 2021

- A new instrument that will encourage:
  - Novelty
  - Excellence
  - Synergy
  - Teams
- 9 NESTs awarded on Oct. 27<sup>th</sup>
  - Involves the leading scientists in the WASP domain in Sweden
  - Span across the core disciplines
  - Strong focus on AI/ML
  - Project start April 1<sup>st</sup> 2022



# Collaboration WASP- DDLS



- First Call for Collaboration Projects Closed Sept 1st
  - Received 72 applications
  - PIs at all academic levels
  - 15 Projects granted



# Wallenberg Research Arenas- WARA

*WASP Research Arenas aim to increase the value and relevance of research by strengthening and promoting collaboration between WASP researchers and industry partners.*

Scenarios

Public Safety  
Saab

Robotics  
ABB

Technology

Common  
Ericsson Research Data Center

Media&Language  
Umeå University and SEB

Software  
Lund University

# Berzelius - AI Resource

- ATOS - NVIDIA SuperPod
- 300 MSEK
- 60 DGX A100 systems
- 8 A100 GPUs/node
- 5 PetaFLOPS/node
- 1800 Gb/s interconnect
- Hosted by the National Supercomputer Centre (NSC) and integrated in the HPC environment for compute and storage solutions



# Diversity and Inclusion Group (DIG)

## Diversity and Inclusion Group

WASP Diversity and Inclusion Group was formed in 2021 with the purpose to increase the gender balance and to improve diversity in WASP. The group includes both members from the WASP community and external experts.

## Goals

- Build up a WASP culture of inclusiveness
- Improve WASP practices in the diversity, inclusiveness and gender equality
- Make WASP a role model for diversity inclusion and gender equality



**Ivica Crnkovic**

Professor, Department of Computer Science, Chalmers University of Technology

+46 729 74 62 64

[Send Email](#)



**Amy Loutfi**

Professor, Department of Science and Technology, Örebro University

[Send Email](#)



**Anoud Alshnakat**

Vice-chair of the PhD Council, Batch 3 AS, KTH

[Send Email](#)



**Katherine Harrison**

[Send Email](#)



**Mary Sheeran**

[Send Email](#)



**Per Runeson**

Professor, Department of Computer Science, Lund University

[Send Email](#)





WASP

WALLENBERG AI,  
AUTONOMOUS SYSTEMS  
AND SOFTWARE PROGRAM