



**WASP**  
**2021 Kick-Off**  
**Anders Ynnerman**



# WASP

Wallenberg AI, Autonomous Systems and Software Program

Largest individual research program in Sweden ever

- **5.5 billion SEK for 15 years till 2030**

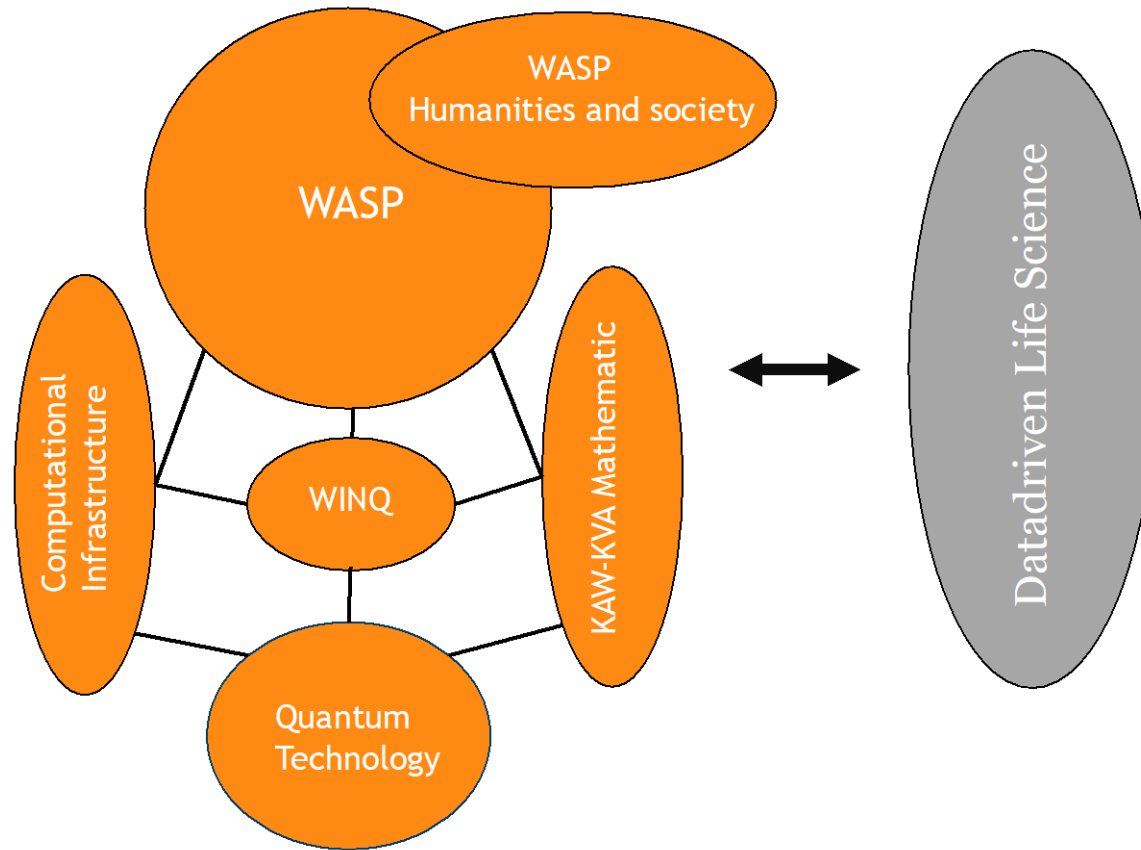
Knut and Alice Wallenbergs stiftelse 4.2 billion SEK, Universities, Industry.

# 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.

# The WASP context



*Knut och Alice  
Wallenbergs  
Stiftelse*  
100 ÅR AV STÖD TILL EXCELLENT SVENSK  
FORSKNING OCH UTBILDNING

# Current WASP Instruments

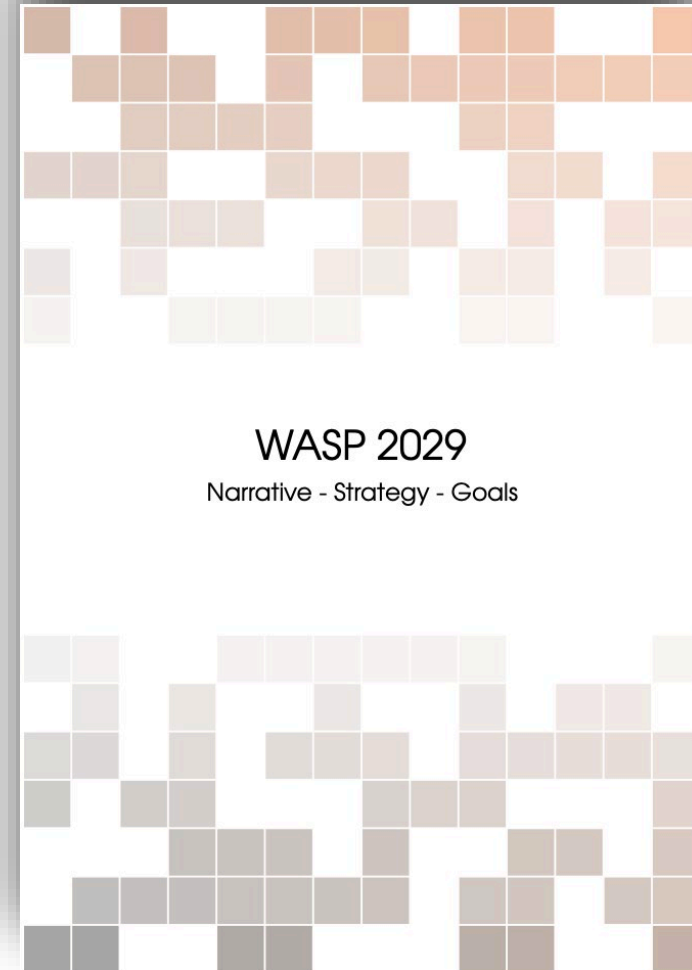
- Research Program
- Graduate School
- Recruitment
- Research Arenas
- Internationalization
- Communication, Events and Networking

# Main Highlights

- Funding from KAW now adding up to **4.2 BSEK**, yielding a total budget of **5.5 BSEK**.
- Recruitment of **eight professors in autonomous systems and software**.
- Top-level recruitment of **Wallenberg Chairs**, now nine in total.
- Recruitment of **assistant/associate professors in AI**, now 20 in total.
- Growth of Graduate School, now with **300 PhD students**, 98 industrial PhD students.
- About **40 companies** engaged in WASP.
- Three **new initiatives** aimed at PhD students approaching their exams:
  - postdoc program,
  - industrial network program
  - program for supporting the initial stages of innovation and research validation
- Sister program WASP-HS for research in **humanities and social sciences**.
- A new initiative by KAW, **Data Driven Life Science**
  - dedicated funding for collaborative efforts with WASP.
- Large scale investment, 300 MSEK, in an **infrastructure for AI** by KAW .

# WASP 2029 - 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



# Wanted WASP positions 2029

- P1:** AI-AS-S research in Sweden has generated far reaching impact in society and industry and has thus been a key component in maintaining Sweden's role as a leading digital nation
- P2:** The general level of AI-AS-S research in Sweden is at the international forefront both in terms of quantity, quality and coverage of strategic areas
- P3:** Swedish universities host a large number of internationally renowned scientists (senior as well as junior)
- P4:** Sweden offers the most attractive PhD program in AI-AS-S for national and international students
- P5:** Sweden has world-leading research environments, networks and laboratories in AI-AS-S
- P6:** Swedish industry is thriving at the top of innovation and competence, accelerated through exchanges of knowledge and in-depth collaboration with universities
- P7:** Successful spin-off companies are continuously being created in Sweden and strengthen the attractiveness and competitiveness of the Swedish industrial environment
- P8:** Sweden is a premier partner in strategic alliances and exchanges with world-leading universities, organizations and companies in these areas, leading to investment in Sweden
- P9:** Sweden is leading by example and serves as a role model for other countries and participates in the formation of the international agenda for future directions of AI-AS-S by hosting meetings, conferences and policy bodies



# 2021 Initiatives

- WASP NESTs
- Research Arenas 2.0
- Industry Bridge
- Industry PhD Call
- Graduate School 2.0



# AI Infrastructure

KAW SNIC investment of 70 MSEK in two stages

Available to all research domains in Sweden

Phase 1: 44 NVIDIA V100 GPUs, 16 NVIDIA T4

Phase 2: Available Q4 2021

KAW 300 MSEK investment in NVIDIA SuperPOD

Exclusive to KAW funded research

Phase 1: 60 DGX A100 servers, 2 DDN AI400X

Phase 2: 40 DGX A100 servers, 1 DDN AI400C

NVIDIA Technology Center will be setup in conjunction with resource



# Career Program

400 top PhDs will graduate from WASP

Many of them will find career opportunities in industry

Some will look for an academic career and may form the basis for the next generation

An instrument for support of the top tier can be a way to leverage WASP investments

- a) If 10% of the WASP PhDs would be of this caliber 40 would be eligible to apply
- b) 25% accepted would lead to 10 establishment packages (similar to WASP recruitment of assistant professors)
- c) Would have to be synchronized with possible postdoc repatriation package

