



AI, Swedish Perspectives and its Ecosystem

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co-director WASP

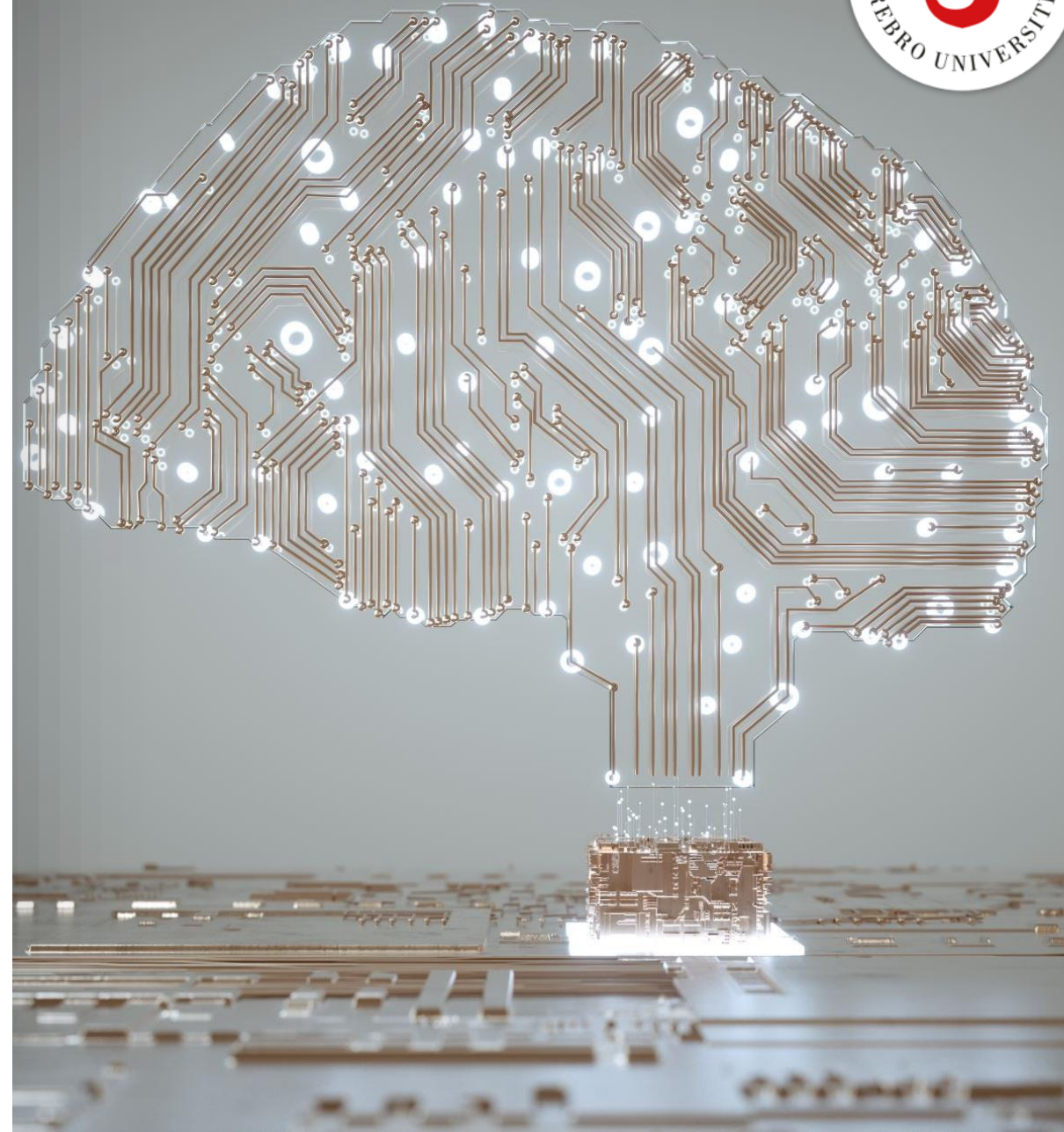


The new AI trends



The new AI trends (for now)

- Generative AI
- Deep Learning
- Federated Learning
- Reinforcement Learning
- Few-shot learning
- Edge AI
-



Swedish AI Ecosystem



AI Innovation, Competence and

Research Ecosystem

Utveckling och användning av AI | Myndigheter, regioner, kommuner || Näringslivet

Stödja Innovation
och tillämpning

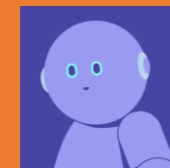


Avancerad
Digitalisering

Utbildning och
kompetensutveckling



AI Competence
of Sweden



elementsofai.se

Forskning



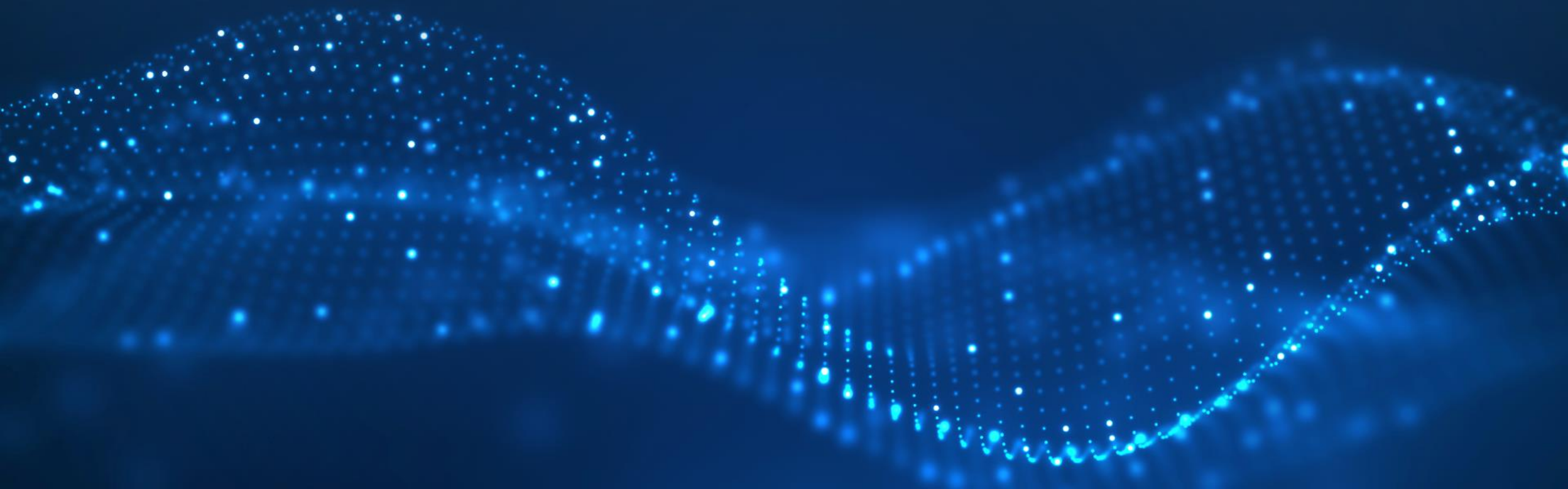
Övriga högskolor &
universitet

Focus on
Excellent
Research



WASP

WALLENBERG AI,
AUTONOMOUS SYSTEMS
AND SOFTWARE PROGRAM





AFFILIATED GROUPS OF EXCELLENCE at



Vision

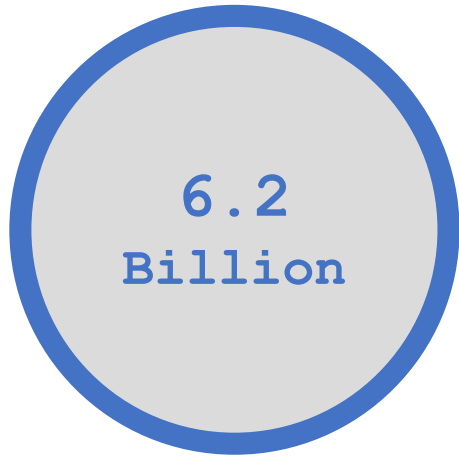
Excellent research and competence in artificial intelligence, autonomous systems and software for the benefit of Swedish society and industry.

Mission

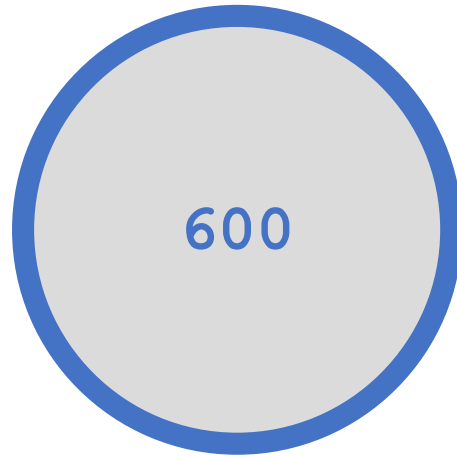
Build a platform for world class academic research that interacts with leading companies and actors in Sweden to develop knowledge and competence for the future.

*Knut och Alice
Wallenbergs
Stiftelse*

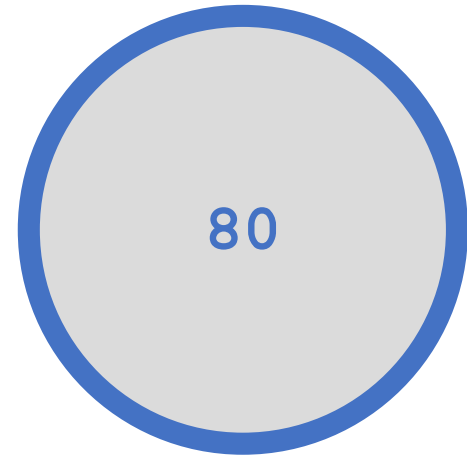
WASP in Numbers



6.2 billion
SEK for 16
years until
2031



600 Graduated
PhDs



80 Faculty
Recruitments

WASP Instruments

The program acts through six strategic instruments. Each instrument is realized by different initiatives and activities.

- Research program
- Graduate school
- Recruitment
- Research arenas
- Internationalization
- Communication events networking



Attracting world-class talent to Sweden

- 15 recruitments in autonomous systems and software
- Top-level recruitments of Wallenberg Chairs, now 9 in total (4 guest professors)
- Recruitment of assistant/associate professors in AI, now 36 in total



WASP providing competence for the future

WASP Graduate School

- 400+ active PhDs students
- Including 100 industrial PhD students
- 90+ have defended



Promoting excellence through collaborations

- 1000 persons engaged in WASP
- 9 NESTs projects (Network, Excellence, Synergies, Teams)
- 28 joint projects with DDLS (Data Driven Life Science)
- 8 Industry Bridge projects
- Networking and events



Societal impact and industrial collaboration

- 80 companies and agencies engaged in WASP
- Goal to examine 150 Industrial PhDs
- Research arenas
 - Two scenario driven arenas: Public Safety and Robotics
 - Two technology driven arenas: Ops and Media & Language

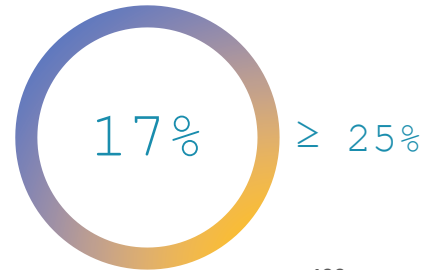


Number of publications 2016-2022



993 conference papers
408 journal articles

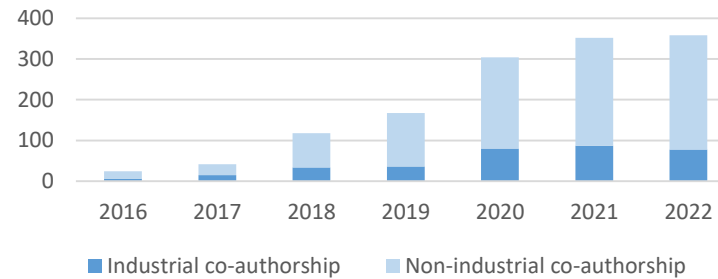
Highly cited publications (top 10%) 2016-2022



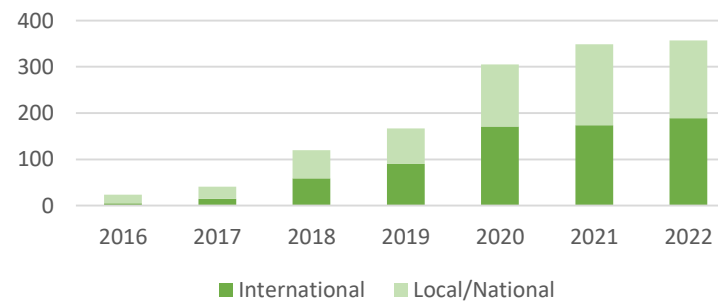
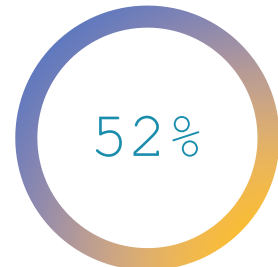
Journal articles: 19%
Conference papers: 16%

Industrial co-authorship

Top 3: Ericsson, ABB, Scania



International co-authorship



Number of highly competitive individual grants received by WASP Faculty



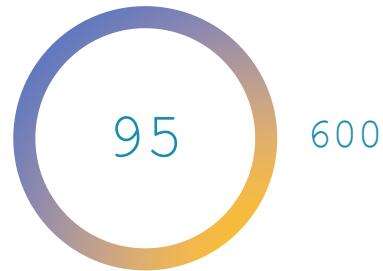
- 3 ERC
- 3 KAW
- 6 SSF
- 26 VR

Number of PhD students



- 85 women (21%) 40/60
- 320 men
- 101 Industrial PhD 150

Number of graduated PhD students



- 20 international postdoc (21%) ≥ 15%
- 63 employed by Swedish industry (66%) ≥ 50%

Examples of spin-off companies

- 7D Labs Inc
- Leapfrog
- Neuromatic
- Nordic Forestry Automation
- Pugstorn, Sparsit AB

≥ 20

Overall assessment of WASP (scale 1-5)



≥ 4.0

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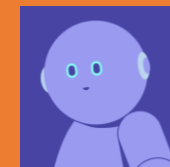


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From the Panel

- Use the ecosystem and mirror it
- Competence, Competence, Competence
- Find the right use case
- Nuance your AI



Tack!