#chalmersAI

CHAIR Overview

Software Center reporting workshop

2019-12-05

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CHALMERS UNIVERSITY OF TECHNOLOGY | AI RESEARCH CENTRE

www.chalmers.se/chair

BUDGET (2019-2028)

Chalmers Foundation: 317 MSEK

- 170 MSEK funding for AI Research projects, recruitment
- 50 MSEK e-commons Infrastructure support
- 100 MSEK collaboration with Fraunhofer Chalmers Centre

Chalmers: 50 MSEK

- 50 MSEK support for AI and data science research engineers

TOTAL: 370 MSEK

Core Partners: 200–300 MSEK
From 5-10 partners (in cash and in kind)

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CHALMERS

FCC

CORE PARTNERS

500+ MSEK

Related funding

• WASP/WASP-AI	150 -200 MSEK (estimation)
• Chalmers AI Education	50 MSEK (estimation)

WASP | WALLENBERG AI, AUTONOMOUS SYSTEMS AND SOFTWARE PROGRAM

Other funding

300+ MSEK

CHAIR GOALS

- Develop unique AI expertise at Chalmers
- Be the preferred AI partner for industry
- Make Calmers an outstanding education university in AI

CHAIR Consortium

CHAIR Core Partners

VOLVO
Volvo Group

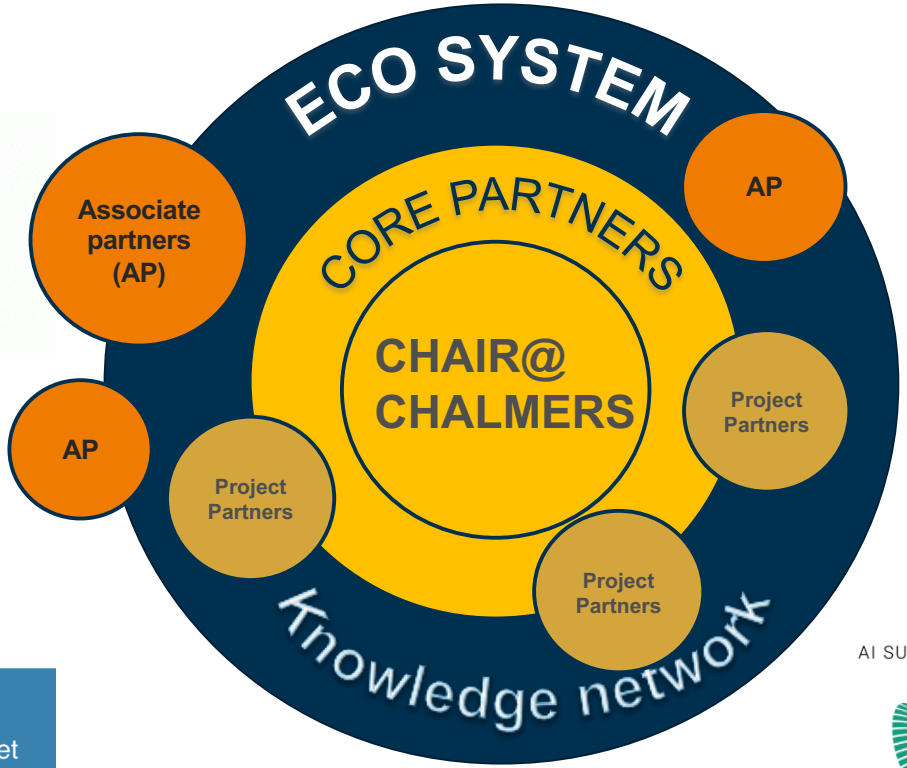
ZENUITY
Make it real.

VOLVO

ERICSSON

CEVT

VÄSTRA GÖTALANDSREGIONEN
Sahlgrenska Universitetssjukhuset



CHAIR Associate Partners

UNIVERSITY OF GOTHENBURG

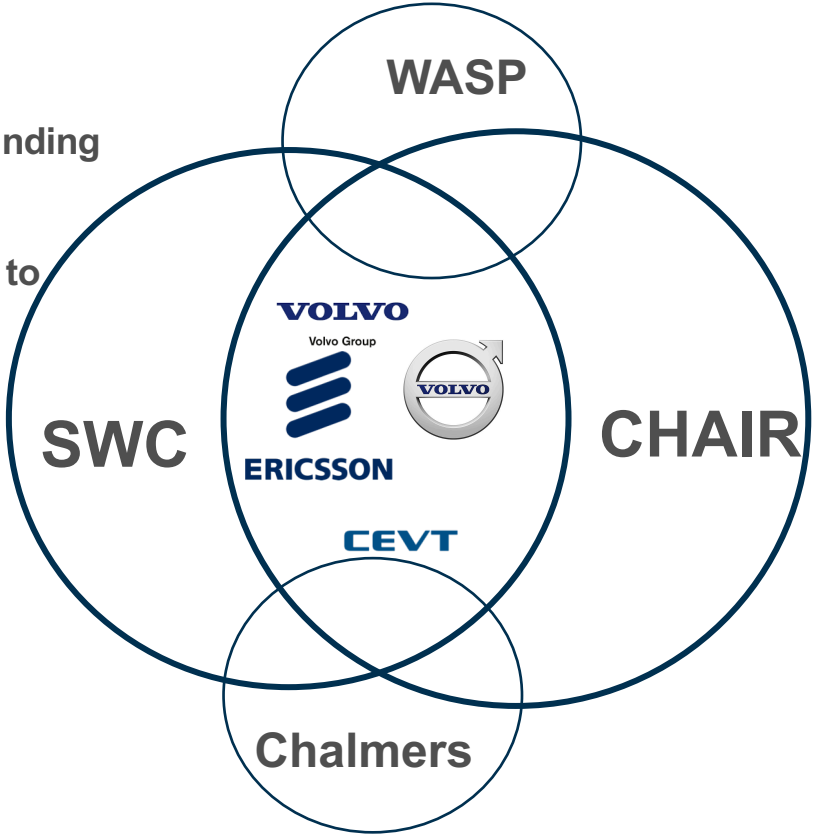
AI SUSTAINABILITY CENTER

FRAUNHOFER CHALMERS
RESEARCH CENTRE FOR INDUSTRIAL MATHEMATICS

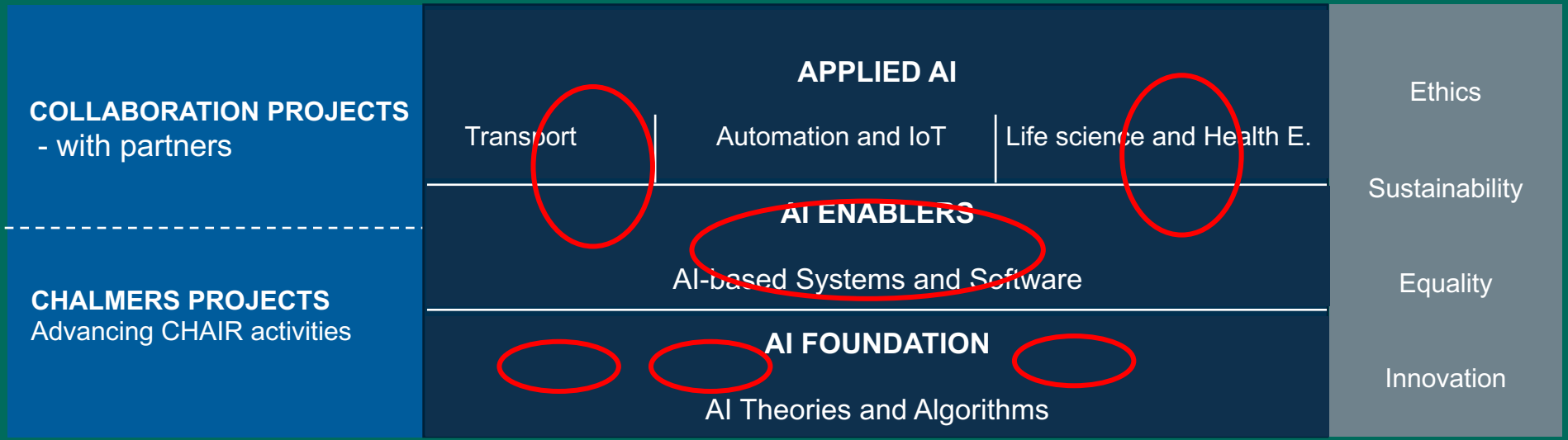
CHAIR and Software Center

String collaboration
CHAIR provides some co-funding
Common Core partners

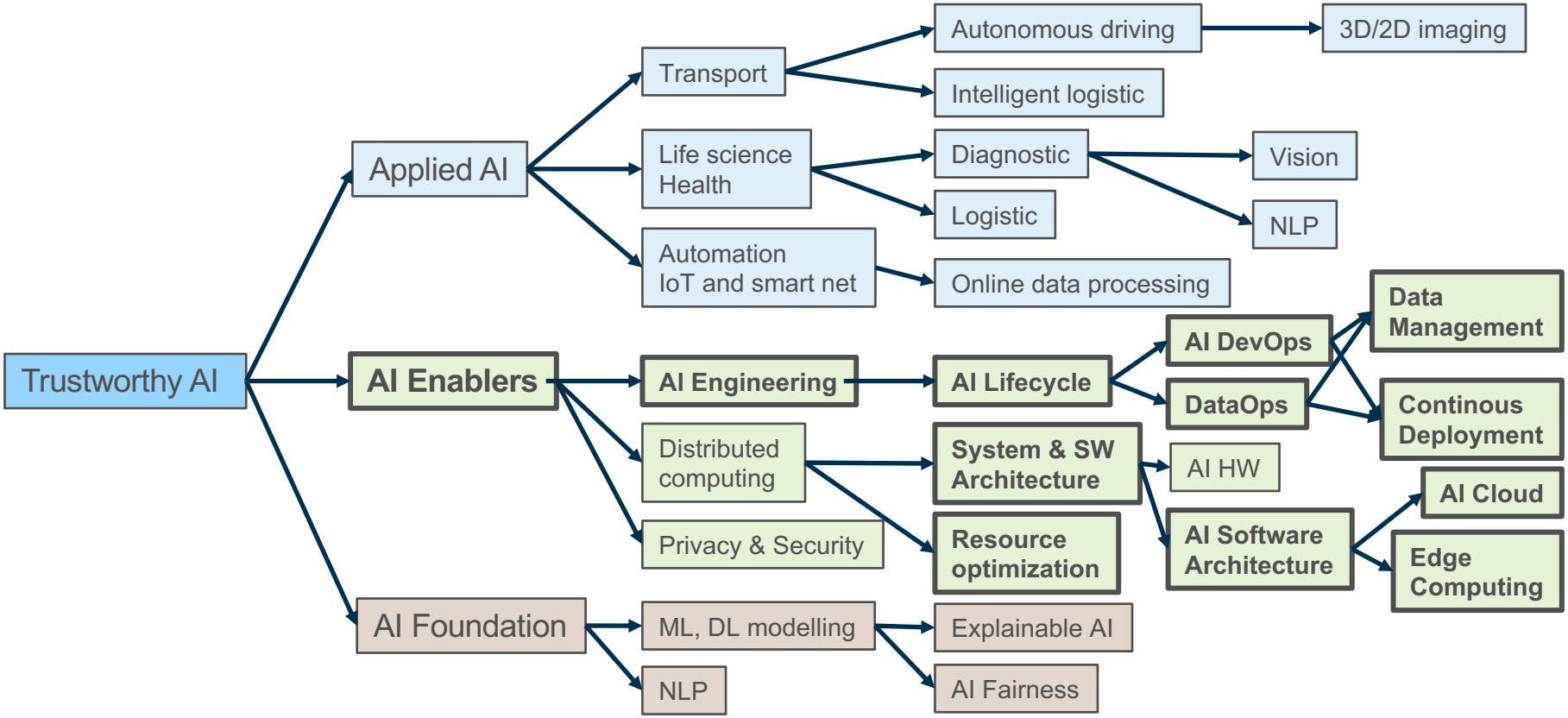
SWC focus strongly related to CHAIR goal



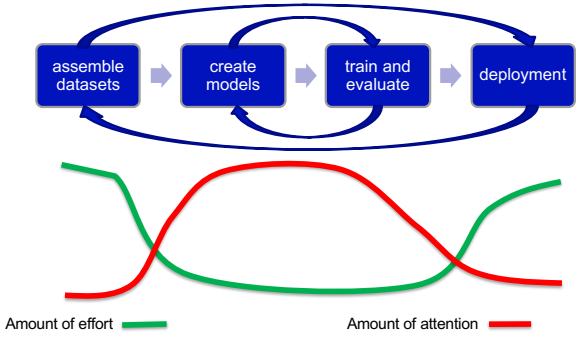
Planned activities - research directions



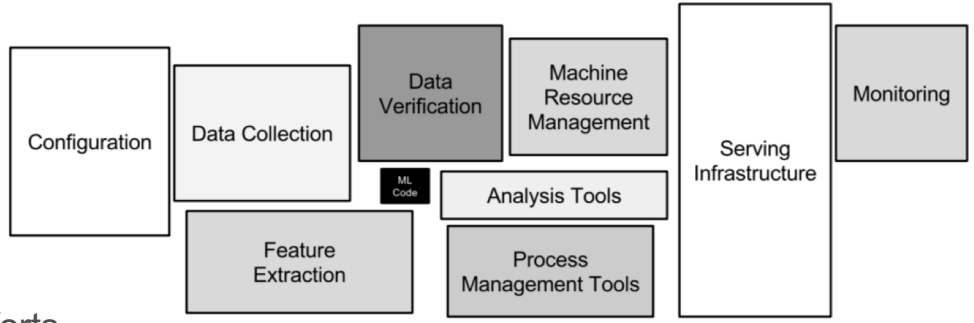
Research directions: AI for systems with specific requirements

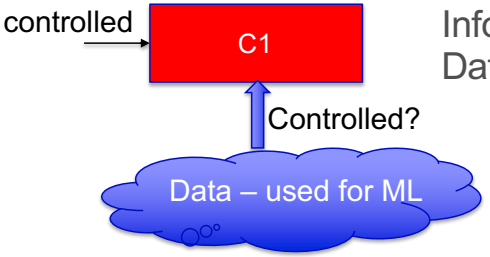


Example 1 – AI engineering - challenges

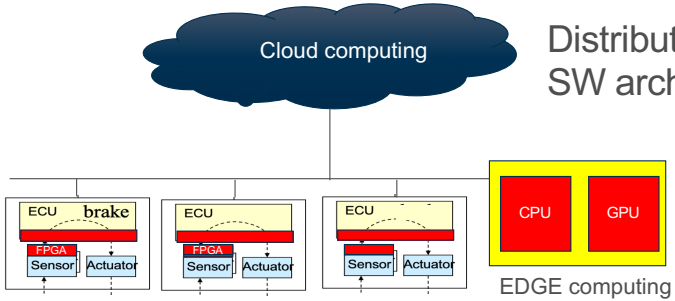


Lifecycle efforts





Information encapsulation
Data dependency



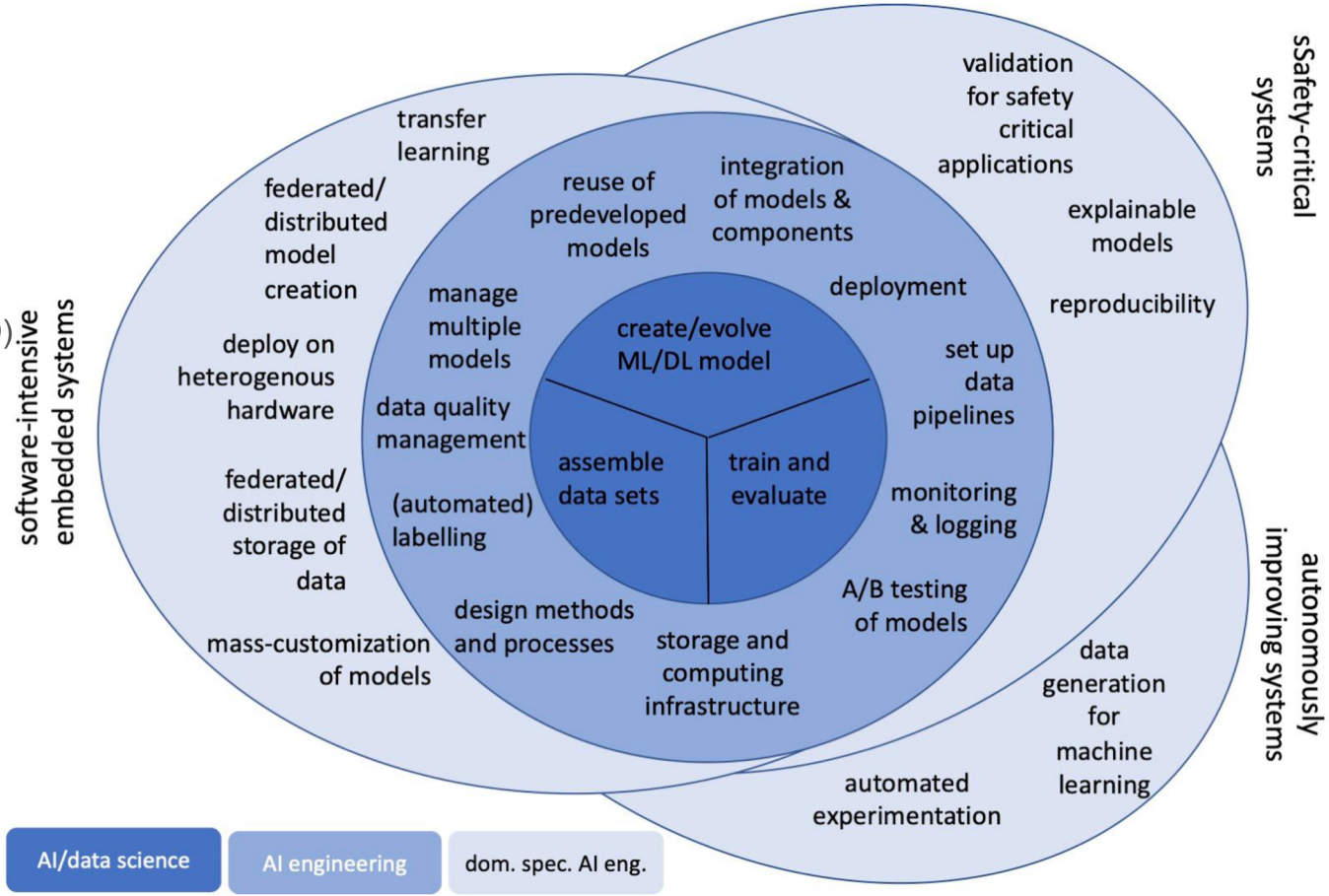
Distributed computing
SW architecture

EDGE computing

AI Engineering Group
- Jan Bosch
- Ivica Crnkovic
- Helena H. Olsson
- 8 PhD students
- 1 Postdoc
- …

Funding:
- Chair (2 PhD students)
- Vinnova (Postdocs+PhD)
- WASP (2 PhDs)
- Software Center (PhD)
- Malmö U (2 PhDs)
- …

- Ericsson
- Volvo AB
- Volvo Cars
- Siemens



conceptualization of AI engineering

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