



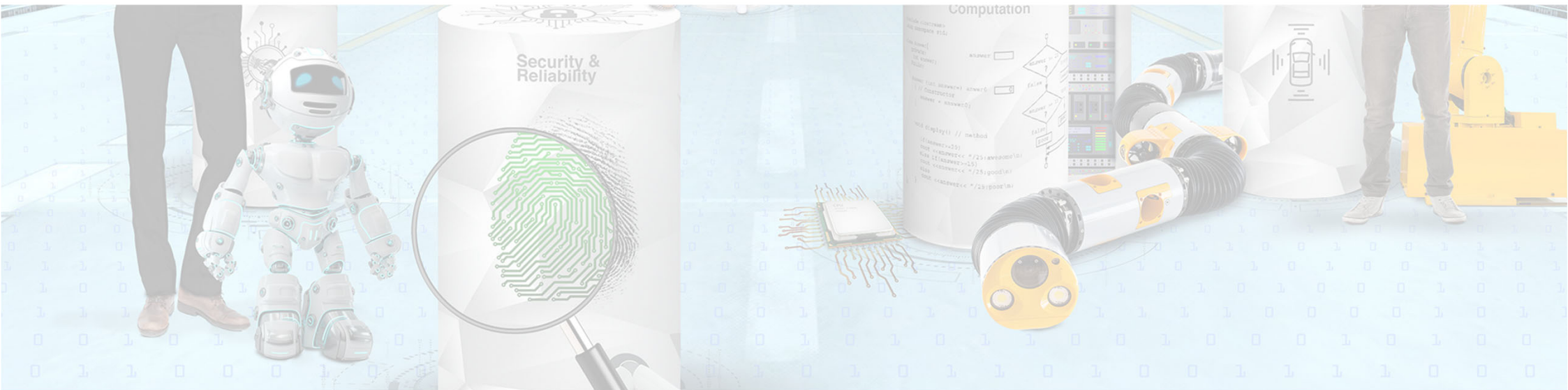
Norwegian University of
Science and Technology

AI research and innovation – Trends, dilemmas and opportunities

Professor Bjarne Foss – Pro-Rector for Research at NTNU

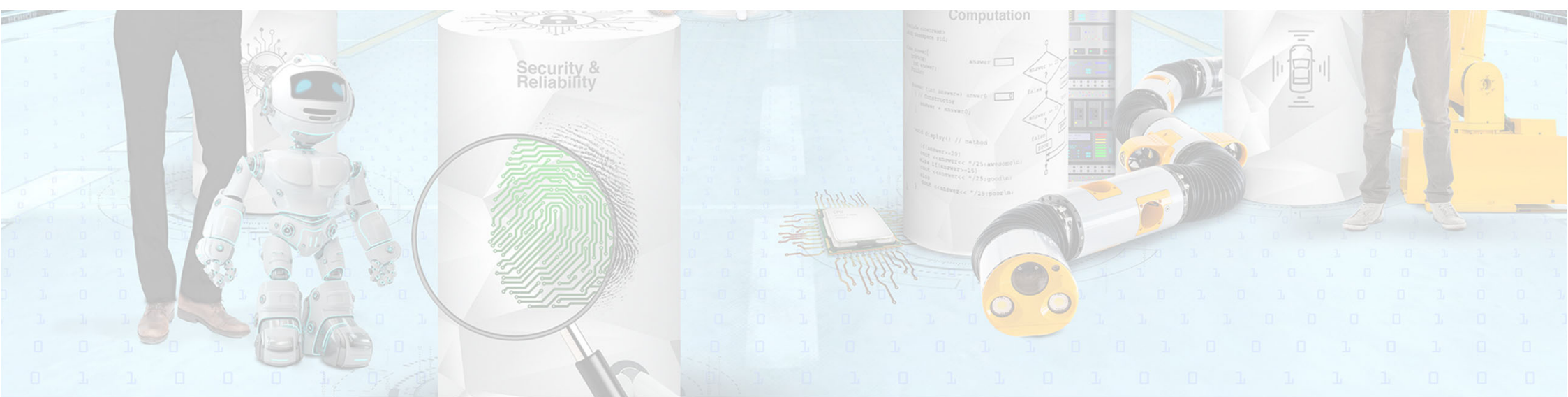
AI

- AI means data-driven technologies



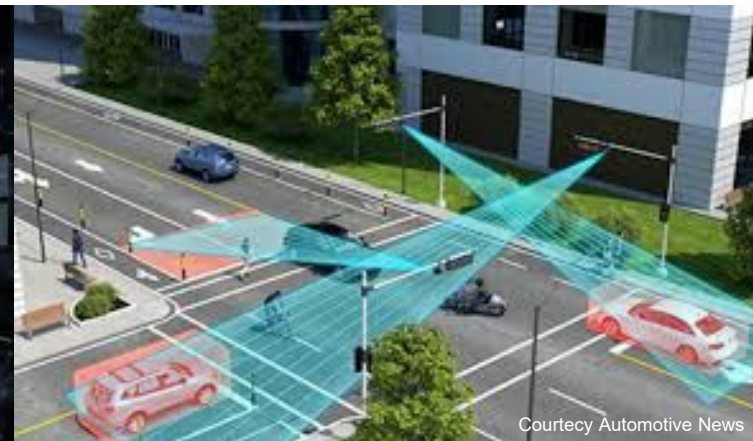
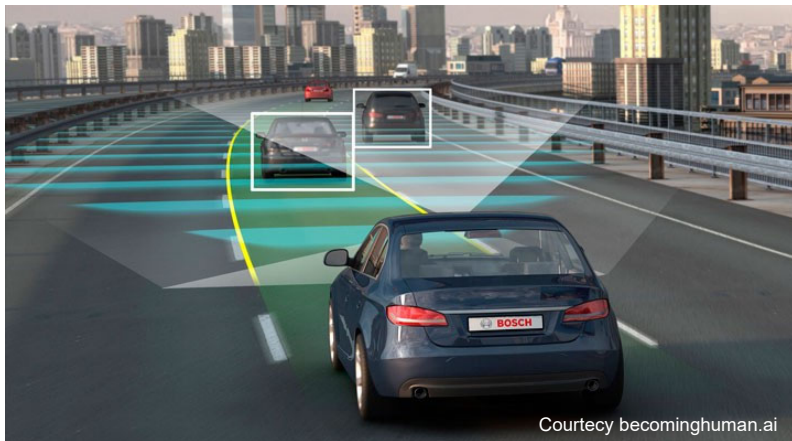
AI – what's new ?

- AI means data-driven technologies
- The abundance and breadth of data is a key to success
- Huge advances in computer power
- Advances in AI methodologies – deep learning technologies
- Management attention and strategic importance



Trends - Autonomous vehicles

- > 13 mill autonomous and connected vehicles in China in 2040
- Chinese consumers are more inclined towards autonomous driving
- Audi, Daimler-Benz and BMW are testing autonomous cars in China
 - Testing hinges one key requirement
- Pertinent question – Where does this leave Europe?



Dilemmas - Ethics

- Numerous incidents raise ethical questions
 - Cambridge Analytica, Facebook Security Breach, IBM Watson
 - Can we establish an AI code of ethics?
 - Across cultures and application areas
 - Lack of transparency of AI's inner logic raises fundamental questions
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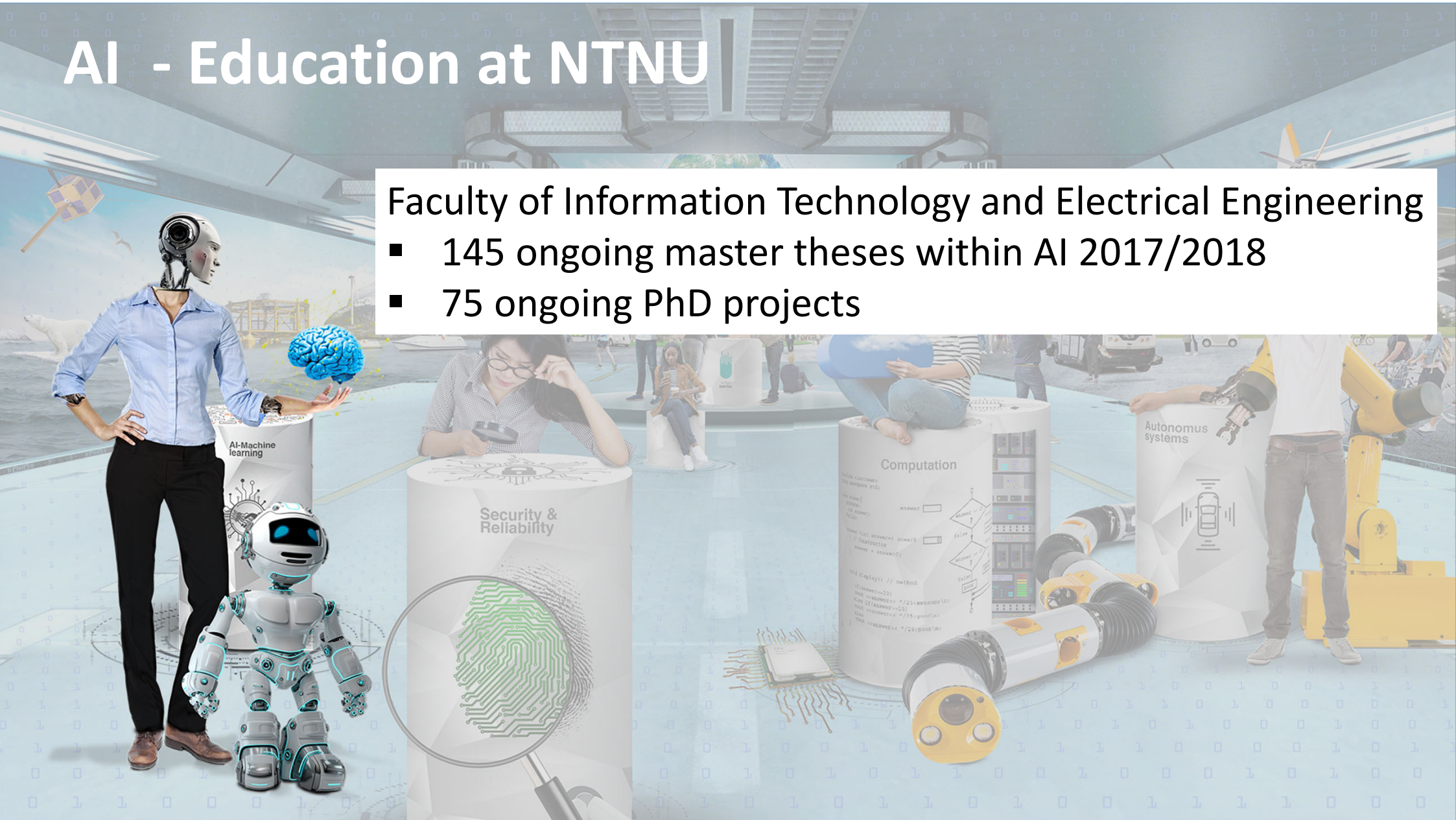
Opportunities – AI at NTNU



AI - Education at NTNU

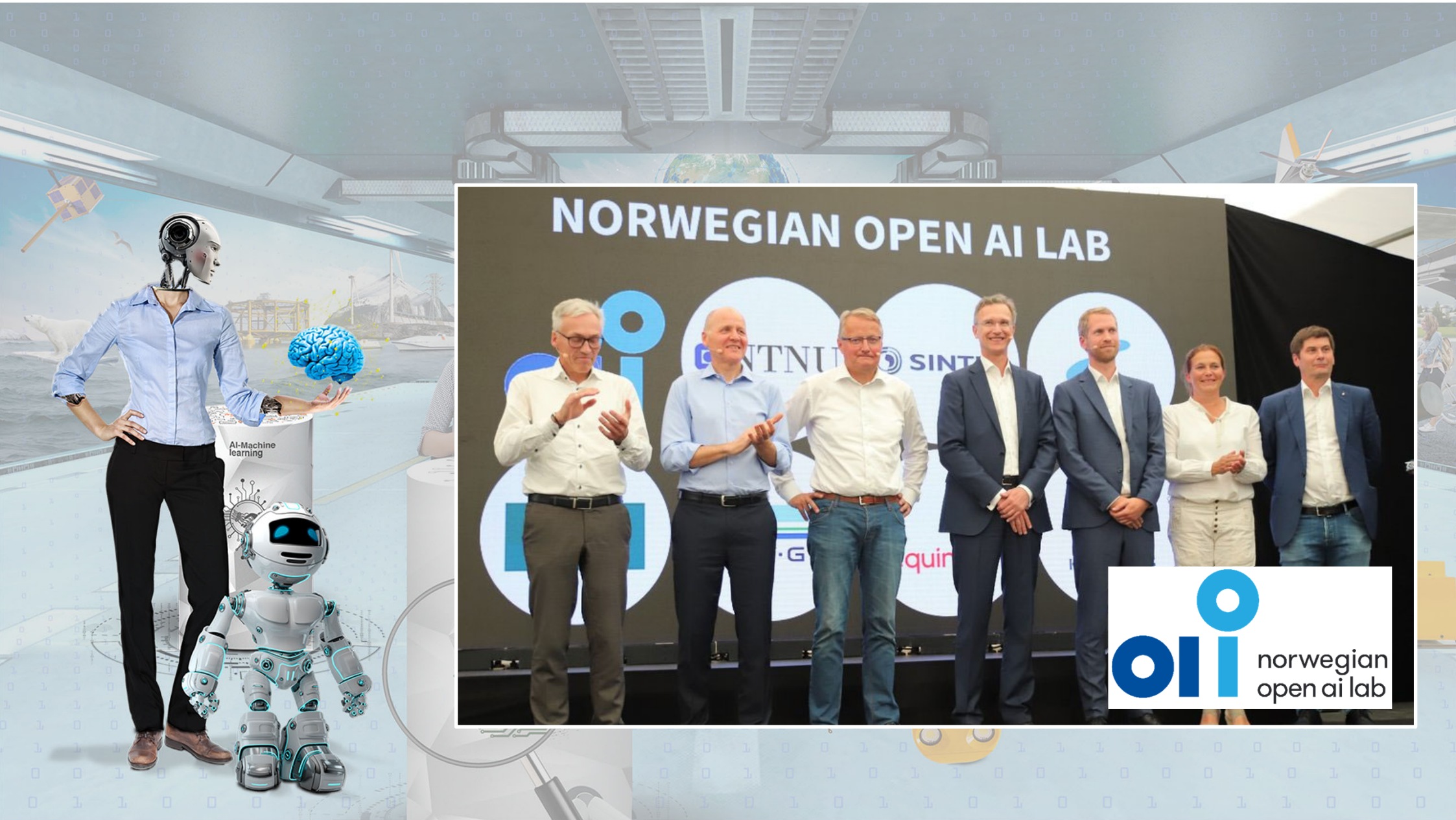
Faculty of Information Technology and Electrical Engineering

- 145 ongoing master theses within AI 2017/2018
- 75 ongoing PhD projects



AI - Research at NTNU





NORWEGIAN OPEN AI LAB





application areas

blue sky

language understanding/
conversational systems

personalization

smart infrastructure

internet of things (IoT)

deep learning

deep reinforcement learning

evolutionary methods

bayesian methods

CBR

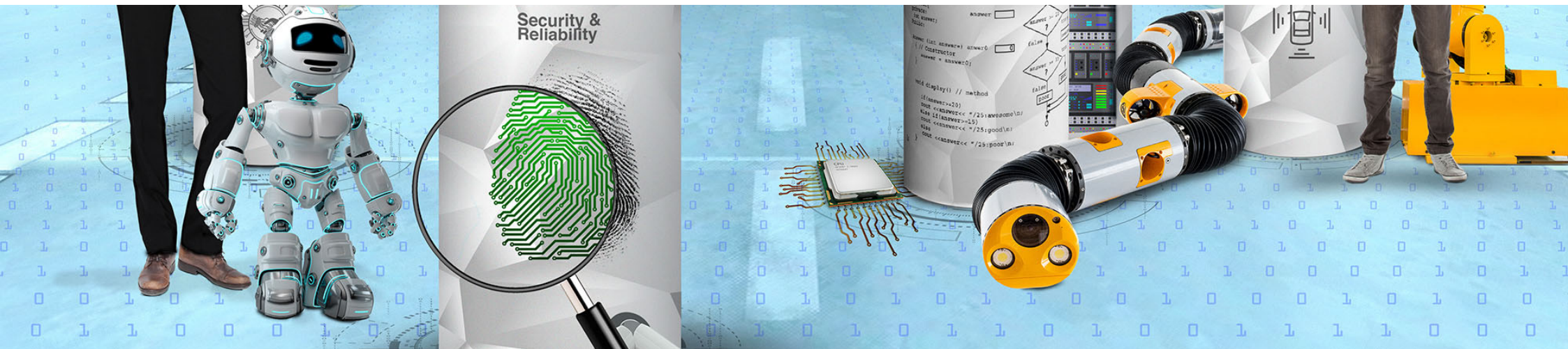
domains

health energy telecom ocean space smart environments



Launching 1st Norwegian Open AI Lab Conference (NOAL 2019)

Trondheim, 18 June 2019



LAUNCHING 1ST NORWEGIAN OPEN AI LAB CONFERENCE (NOAL 2019)

TRONDHEIM, 18 JUNE 2019

