

NTNU-TELENOR AI LAB

Kerstin Bach, Associate Professor, NTNU

Massimiliano Ruocco, Telenor Research & Adj. Associate Professor, NTNU

<https://www.ntnu.edu/ailab>

#telenorntnuai



LAB VISION

- ▶ To apply **open lab** principle
 - ▶ Open to collaboration with the industry
 - ▶ Open to academic collaboration
- ▶ To enable sharing of data sets and research problems
 - ▶ Strong adherence to Ethics and Data Privacy requirements
 - ▶ Implementation of appropriate Data Sharing routines



RESEARCH OBJECTIVES AND VISION



- ▶ To enable both basic and applied research
- ▶ To allow wide variety of research areas
- ▶ To perform research at highest international level
- ▶ To enable cross-disciplinary collaboration

GOVERNANCE STRUCTURE – PEOPLE

Executive Board

- ▶ Rector of NTNU – **Gunnar Bovim**
- ▶ Dean of the IE Faculty – **Geir Egil Øien**
- ▶ Head of Strategic Area Digital at NTNU – **Torbjørn Karl Svendsen**
- ▶ CEO Telenor Group – **Sigve Brekke**
- ▶ CEO Telenor Norway – **Berit Svendsen**
- ▶ Telenor representative at CXO level – To Be Decided

Steering Committee

- ▶ Head at the Department of Computer Science – **Letizia Jaccheri**
- ▶ Chair of the Research Committee at the Department of Computer Science – **Agnar Aamodt**
- ▶ Vice Dean for Research at IE Faculty – **Bjarne Helvik**
- ▶ Head of Research – **Bjørn Taale Sandberg**
- ▶ Head of AI and Analytics group – **Astrid Undheim**
- ▶ Head of Office of Digital Innovation Network (ODIN) – **Ieva Martinkenaite**

Coordinators

- ▶ Associate Professor, Department of Computer Science, NTNU – **Heri Ramampiaro**
- ▶ Senior Research Scientist, ODIN, Telenor Research – **Sigmund Akselsen**



STAFFING

- ▶ Current Telenor and NTNU staff members

In addition:

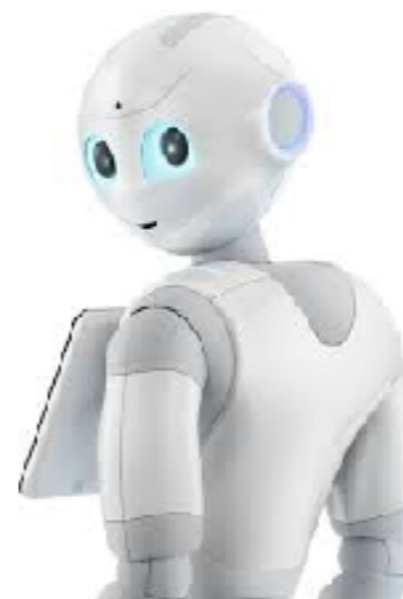
- ▶ Fully funded Professorship in AI and Machine Learning
- ▶ Fully funded Postdocs in AI and Machine Learning
- ▶ Fully funded PhD Fellows
- ▶ Partly funded lab assistant & internships





AI-LAB INFRASTRUCTURE & FACILITIES

- ▶ Enable “hassle-free” data sharing and research
- ▶ Facilitate fast innovation: creativity-enabling technology
- ▶ State-of-the-art devices, servers, research and development “AI-toys”, etc.
- ▶ **Lab-scale & cloud-scale** experiments



State-of-the-art Infrastructure

RELEVANT EVENT INVOLVEMENT

- ▶ Regular AI & Big Data Hackathons
- ▶ Workshops
- ▶ Demo events, science fairs and show cases
- ▶ Involvement in international conference organization





Facebook event page for "Telenor-NTNU AI-Lab: Pre Hackathon event". The event is scheduled for December 13, 2016, from 16:00 to 18:00. It is hosted by Massimiliano Ruocco and Sigmund Akselsen. The location is Drivhuset, 7034 Trondheim, Norway. The event has 54 interested people, 47 people who were present, and 18 invited people.

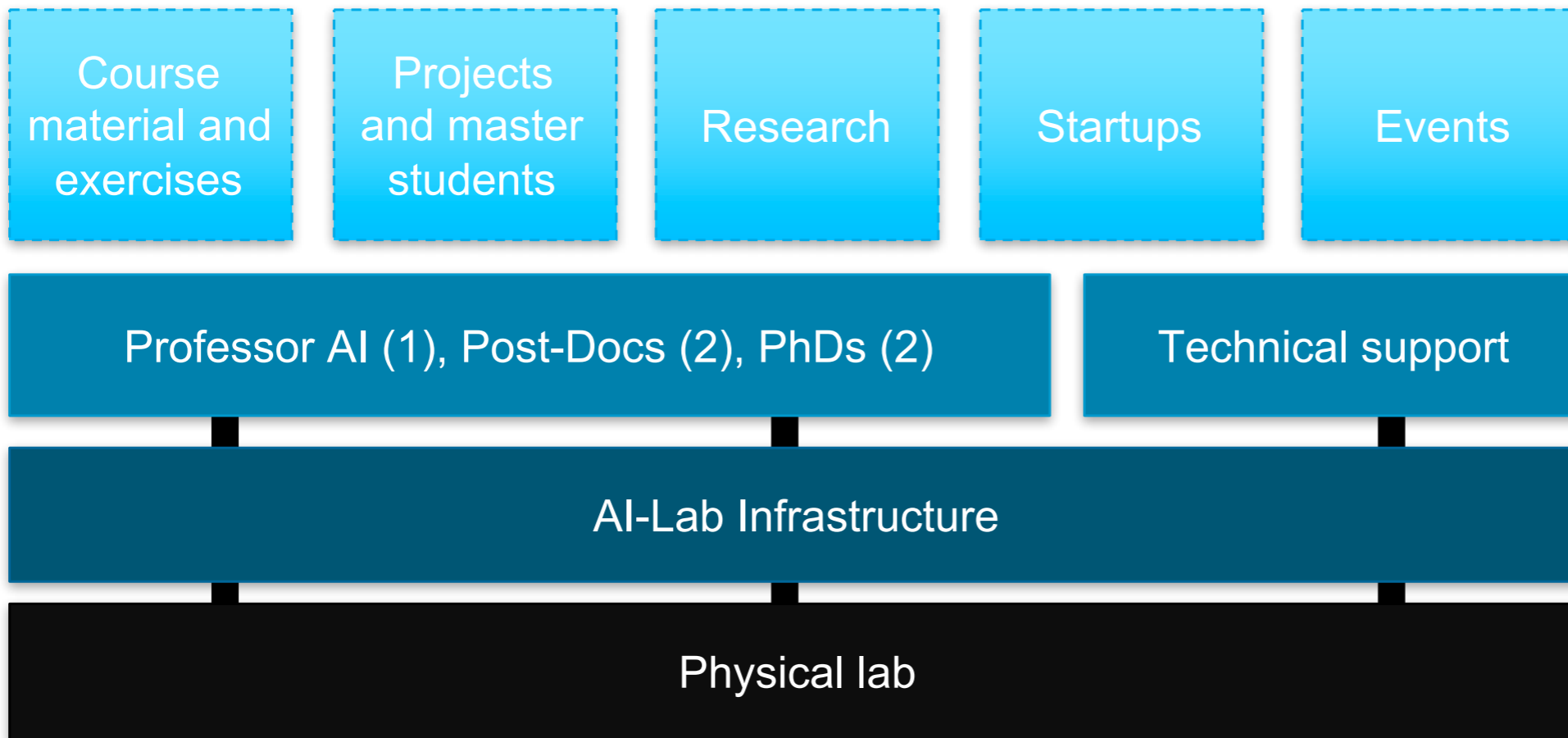


Hackathon on Telco related problems and data:

- Mobility Analytics
- Cyber Security
- Textual Social Media Analysis
- Customer Service Forecasting



SUMMARY & CONCLUSION



PRINCIPLES FOR PARTICIPATION

- ▶ Cross-disciplinary collaboration at NTNU
- ▶ Third party participation in the Lab
 - ▶ Reasonable relationship between the contributions of partners and the resources / help they could expect from the lab
- ▶ Strong adherence to Ethics and Data Privacy requirements



TELENOR RESEARCH TOPICS & RESEARCH AREAS FOR THE AI LAB

► Personalisation

► Smart Networks

► Internet of Things





artificial
intelligence
lab



telenor



NTNU

SUMMARY & CONCLUSION (CONT'D)

Ultimate goals:

- ▶ To make the lab a national powerhouse for AI & Machine Learning
- ▶ To advance the state-of-the-art in AI, Machine Learning and Big Data
- ▶ To attract more research projects
- ▶ To attract more industrial partners
- ▶ To attract good students



The opening of Telenor-NTNU AI-lab 8 march 2017



COLLABORATIVE RESEARCH AT THE NTNU-TELENOR AI LAB

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