



Aalto University

# Aalto Digi Platform

*Krisztina Cziner Dr.*

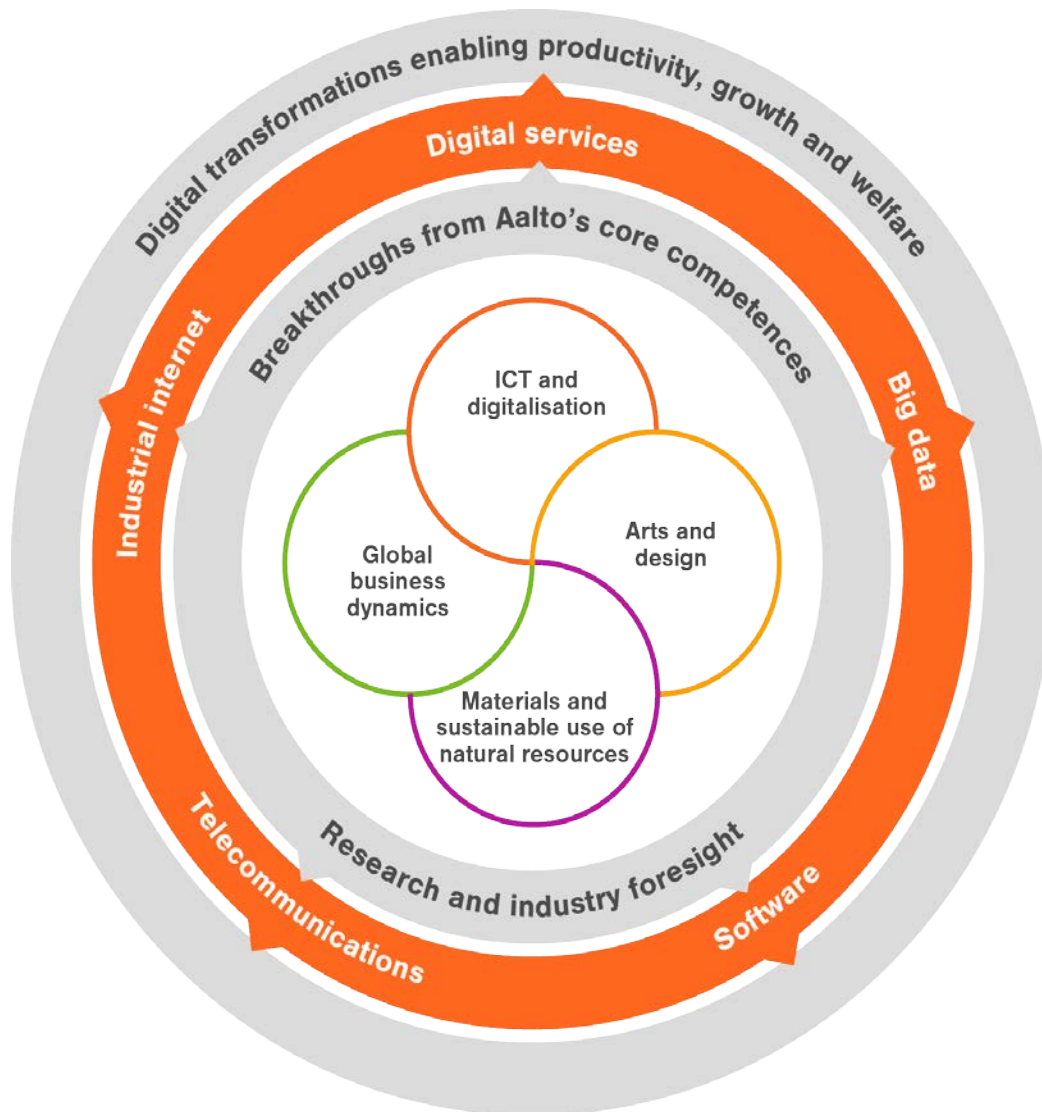
*Digi Platform and Helsinki Institute for Information Technology (HIIT) , Manager*

# Digi Platform

Chair: Yrjö Neuvo

Manager: Krisztina Cziner

Key research area: ICT and digitalization



## Big data

- Computational data analysis
- Business intelligence
- Artificial intelligence

## Software

- Cyber security
- Systems, users and business

## Digital services

- Media, games and culture
- Learning
- Business and economy

## Telecommunications

- Cloud
- 4G and 5G

## Industrial Internet

- Robotics and automation
- Networked machines

# Aalto is a Key Player in Digitalization

**leading university in Finland in digitalization, in the number of students, professors, publications, and funding:**

**~80 professors in core Digi fields, ~80 in applications**

**>400 Master's degrees and ~100 Doctoral degrees each year**

**100 000 study credit points each year**

**50 Meur competitive research funding each year**

**We welcome collaboration! [digi@aalto.fi](mailto:digi@aalto.fi)**

# Facts & Figures

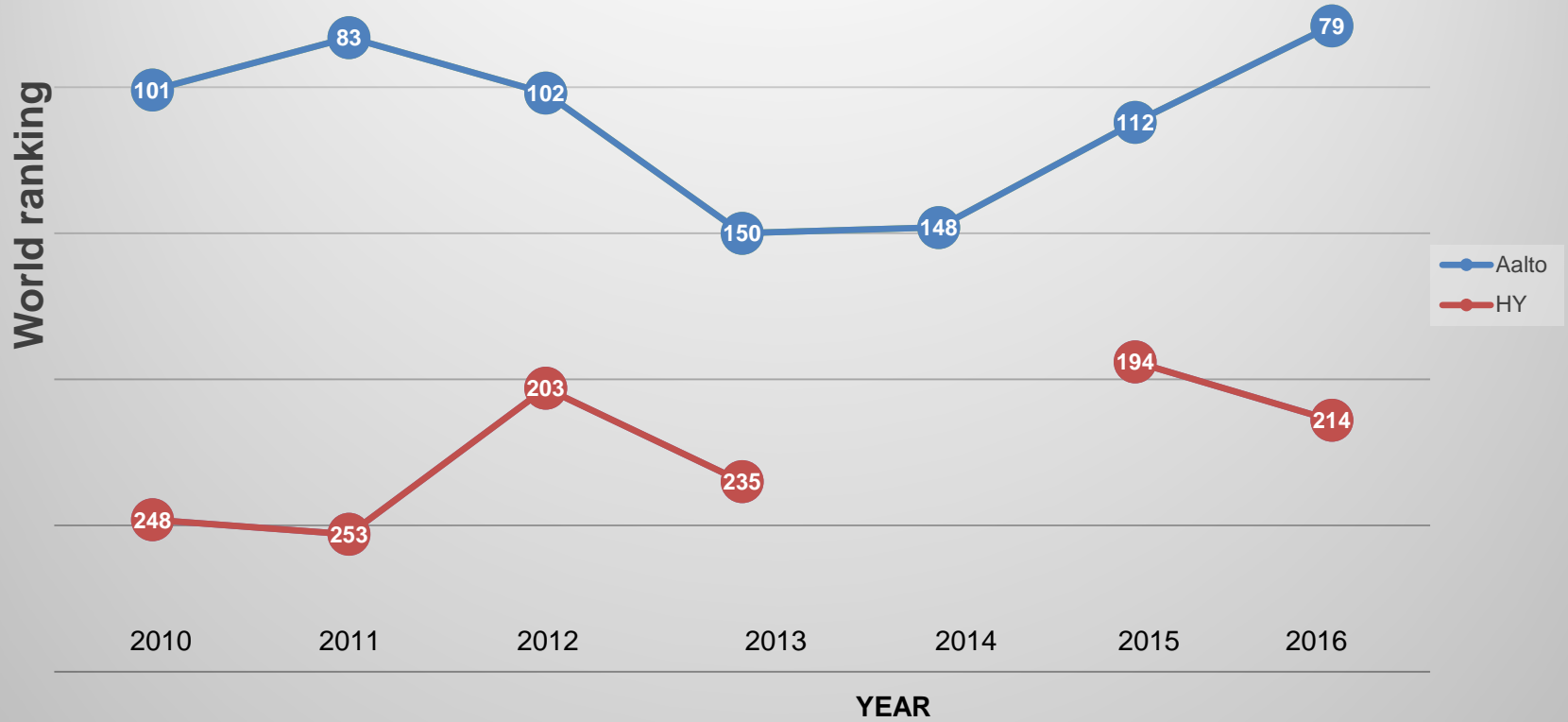


## ICT ja digitalization

Ranking list	Finland	Nordic countries	Europe	World
ARWU (Shanghai) – Computer Science 2015	1	5	36-52	151-200
US News – Computer Science 2016	1	2	14	60
NTU – Computer Science 2016	1	1	13	79
QS – Computer Science and Information Systems 2016	1	2-6	32-50	101-150
CWTS Leiden Mathematics and Computer Science (number of top10% papers) 2016	1	2	20	97

Source: <http://www.aalto.fi/fi/about/ranking/keyareas/>

## NTU world ranking of Aalto CS vs. HY CS (2010-2016)



# Activities of Digi Platform

**Cooperation and communication:** Internal and external

**Digi Breakfast meetings are open, thematic and Aalto-wide**  
e.g. Industrial Internet, E-learning, Big Data, Mobile Communications, Digital Consumer Services, Smart Campus, Cultural Heritage, Digital Health, Cyber Security

**Task forces on Aalto's key digi themes**

Data Repository, Industrial Internet, Cross-School teaching etc.

**Research and industry foresight activities**

Follow the field in general, assess future needs, provide expert opinions

**Funding for public outreach activities**

Studia Generalia lecture series "Internet Forum"; Digitalization of Cultural Heritage; Programming MOOC for primary school teachers

# Aalto Digi Platform Matchmaking Event 23.03.2017 attracted 80 companies



*Over 300 registrants, 6 keynotes, 19 demo stands, 15 posters and 10 pitch talks.*

*Opening words by minister of Transport and Communications Anne Berner.*

*Video recording of the event is available at:*

*<https://www.youtube.com/watch?v=Zd4vQq8RBiU>*



*Full material is available at:*

*[http://digi.aalto.fi/en/aalto\\_digi\\_matchmaking\\_2017/](http://digi.aalto.fi/en/aalto_digi_matchmaking_2017/)*

# Main outcomes of Digi Platform

Incubated the cross-school collaboration in Internet of Things research area, and Aalto Industrial Internet Campus

Incubated and kick-started Aalto Data Repository (in progress)

Initiative to make basic programming courses mandatory for all Aalto students (in progress)

Initiated an internal mobility programme of Aalto's researchers

Seed funding of project preparation often results in large external funding





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# Digi research areas at Aalto University: [digi.aalto.fi](https://digi.aalto.fi)

**Algorithms, Logic and Complexity**  
**Computational Sciences**  
**Cyber Security**  
**Data Science**  
**Digital Health**  
**Digital Media, Culture and Learning**  
**Digital Services**  
**Electrical Power Engineering and Smart Grid**  
**Geoinformatics and Smart Spaces**  
**Industrial Internet**  
**Robotics and Automation**  
**Micro and Nanotechnology based ICT Hardware**  
**Radio Science and Engineering**  
**Software Engineering and Business**  
**Telecommunications**