



Digital  
MASTER SCHOOL

# EIT DIGITAL MASTER SCHOOL

*Tomorrow's Digital Innovators and Entrepreneurs*

Petri Vuorimaa, Aalto University

30.10.2020



## Student Life

---



- Aalto has six schools with around 12 000 students and 4000 employees of which close to 400 are professors
- Our campuses are located in Espoo and Helsinki, Finland
- With 37% of our academic faculty coming from outside Finland, we are a highly international community with strong academic standing

# Professors

---

- **Prof. Perttu Hämäläinen:** *games, animation technology, human-computer interaction, gameplay innovation, exercise gamification, procedural animation*
- **Prof. Juho Kannala:** *computer vision, machine learning*
- **Prof. Samuel Kaski:** *machine learning, probabilistic modelling, artificial intelligence, bioinformatics, computational medicine, user interaction, brain signal analysis*
- **Prof. Jaakko Lehtinen:** *computer graphics, physically-based image synthesis, appearance capture, realistic image synthesis*
- **Prof. Tapio Lokki:** *room acoustics, perception, virtual acoustics, 3D sound, psychoacoustics, binaural technology*
- **Prof. Lauri Malmi:** *computing education research, educational technology, software visualization, gameful learning*
- **Prof. Lauri Savioja:** *room acoustics, virtual acoustics, audio, virtual Reality*
- **Prof. Tapio Takala:** *computer graphics and animation, new interaction technologies, multimodal interaction, social media*
- **Prof. Petri Vuorimaa:** *web services, web applications, web of things*

## Compulsory Courses

---

- WWW Applications (5 ECTS)
- Introduction course for Master's students (1 ECTS)
  - Career and working life skills
- Language course (3 ECTS)
  - Compulsory degree requirement, both oral and written requirements
- I&E Study Project (6 ECTS)

## Optional Courses

---

- Computer Vision (5 ECTS)
- Complex Networks (5 ECTS)
- Social Media (5 ECTS)
- Mobile Cloud Computing (5 ECTS)
- Big Data Platforms (5 ECTS)
- Special Course in Computer Science (1-10 ECTS)
- Special Assignment in Computer Science (1-10 ECTS)
- Individual Studies in Computer Science (1-10 ECTS)

## Recent Thesis Topics

---

- Managing Data Visualization Pipeline with Backbone.js and D3.js
- Benchmarking Performance of Data Serialization and RPC Frameworks in Microservices Architecture
- MimiSmile: Mimicking game using 3D virtual characters' facial expressions for learning scenarios for children with autism
- Contracting Service for Industrial Internet

## Recent Thesis Topics

---

- Ethereum Blockchain Visualization with Semantics <sup>7</sup>
- TalentPal: A Platform for Newcomers and Locals to Integrate
- Instant Load: Improving Loading Performance of Single-Page Applications
- UI Construction for a Web-Based IDE on an Industrial IoT System
- Building An AR Treasure Hunt Game Using Indoor Localization Technology
- Serverless data processing applied to big mobility data

# THANK YOU



[masterschool.eitdigital.eu](https://masterschool.eitdigital.eu)

[f](#) [v](#) [in](#) [t](#) @EIT\_Digital

EIT Digital is supported by the EIT,   
a body of the European Union

**Tomorrow's Digital Innovators and Entrepreneurs**