Course Overview

Distributed and Pervasive Systems, MSc

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Aarhus University

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Outline

Outline

Lecturer: Christian Fischer Pedersen

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Christian Fischer Pedersen
Associate Professor, PhD
Dept. of ECE, AU
Åbogade 34, Office 119, 8200 Aarhus N.

Research interests

- Biomedical signal/image/data processing
- Clinical decision support systems
- Machine/statistical learning in healthcare

Lecturer: Christian Fischer Pedersen

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Education

- 2016: MSc, Math and Computer Science, AAU
- 2011: PhD, Speech Signal Processing, AAU
- 2001: MSc, Computer Engineering, AAU

Positions

- 2011– : Dept. of ECE, AU
- 2001–2011: Dept. of Electronic Systems, AAU

Visiting scholar

- 2014: U of Erlangen-Nuremberg, DE
- 2013: Shanghai Jiao Tong U, CN
- 2010: Imperial College London, UK
- 2010: Aalto U, Helsinki, FI

Lecturer: Stefan Wagner

Stefan Wagner
Associate Professor, PhD
Dept. of ECE, AU
Finlandsgade 22, Office 226, 8200 Aarhus N.

Research interests

- Pervasive healthcare
- Ambient assisted living
- Clinical decision support systems

TA: Christian Marius Lillelund

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Christian Marius Lillelund
Research Assistant, MSc
Dept. of ECE, AU
Åbogade 34, Office 127, 8200 Aarhus N.

Research interests

- Machine/statistical learning
- Cloud computing

TA: Christian Marius Lillelund

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Education

- 2020: MSc, Computer Engineering, AU
- 2018: BSc, ICT Engineering, AU

Positions

- 2020– : Dept. of ECE, AU

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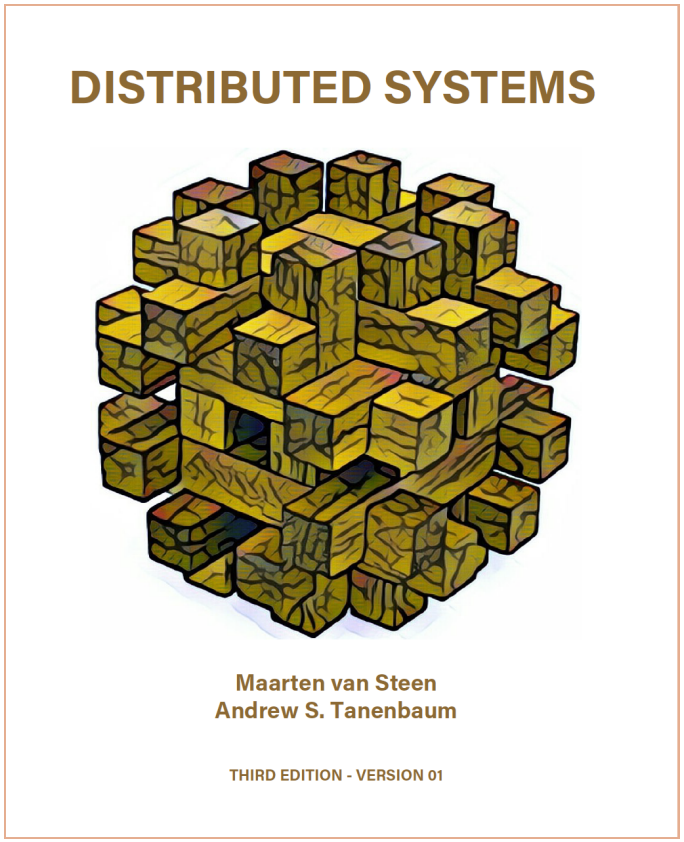
Literature

Book

- Marten van Steen and Andrew S. Tanenbaum. Distributed Systems. 3rd ed. (ver. 3.02). Distributed-systems.net, 2018.
- Note the edition and version no.
- Download for free

Articles and tutorials

- To supplement the book
- Due to copyright, download yourself. Access via AU net / library



Outline

Why do we need this course?

Many modern computing systems are to some extent distributed and weaved into natural living environments. Examples include:

- IoT, fog, edge, cloud computing systems
- Energy production in wind farms
- High performance computing systems
- Distributed audio/factory/healthcare systems
- Social media and many cyber-physical systems

Connections with the overall education

Connects in particular with courses related to

- Network and communications
- Software design and architecture

Relevance for companies

Plenty of companies address challenges that are to some extent related to distributed systems. Some of the companies we have worked with are:

- Danske Bank
- Stibo
- Vitrolife
- DigiRehab
- Develco
- ...

Outline

Course practicalities

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Brightspace

- Brightspace used for all updates and communication
- Occasional changes to course plan

Course practicalities

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Slides

- Proofread but errors and omissions may occur
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Communication

- Emails are welcome; however, we receive very many emails on a daily basis, so please allow some time to respond. We encourage you to communicate with us during the course sessions.

Outline

Action points

- Team up
- Use Brightspace's "self-enroll" functionality
- Let us have a look at Brightspace and the course plan