# Welcome to the
# Software Center reporting workshop

## December 3, 2020

**Time:** 10:00 – 17:00
**Place:** Teams (digital)

**Agenda:** https://www.software-center.se/event/reporting-workshop-dec2020/

**Registration**: https://forms.gle/9yv32QhW93Vn8BcS8

# Agenda

10:00-10:15: **Opening** – Jan Bosch

10:15-10:30: **Introduction of new partners**

10:30-11:00: **Shifting Gears: Towards Continuous Value Flow**
Keynote presentation by Frances Paulisch, Siemens Healthineers

11:00-12:00: Community updates in parallel:

- **Software engineering**
  Chairs: Miroslaw Staron, Wilhelm Meding, Jan Carlson and Kristian Sandahl

- **Product management**
  chair: Helena H Olsson

- **Systems engineering**
  Chairs: Anders Kvist, Ericsson, and Magnus Timmerby, Tetra Pak

- **AI engineering**
  Chair: Jan Bosch

12:00 – 13: 00: Lunch break

13:00 – 15:00: Up-dates from **Software Center projects** – parallel tracks
(up-date closer to the event)

**Afternoon plenary sessions:**

15:15 – 15:45: **Enabling A/B testing at scale: It's all about trustworthiness & keeping the momentum**
Keynote presentation by Aleksander Fabijan, Microsoft

15:45 – 16:15: Plans, reflections & closing: Jan Bosch

**Contact us**
Jan Bosch, Director
jan.bosch@software-center.se
031-772 57 16

**For agenda up-dates, visit the Software Center web site**
**www.software-center.se**

## Software Center projects

**#2 Managing Architectural Technical Debt**
Antonio Martini, Terese Besker, Jan Bosch

**#3, Team maturity model**
Wilhelm Meding

**#5, Accelerating Digitalization Through Data**
Helena H. Olsson and Meenu Mary John

**#6, Enterprise Scale Continuous Integration and Delivery**
Daniel Ståhl and Torvald Mårtensson

**#9, Strategic Ecosystem-driven R&D Management**
Helena H. Olsson

**#19, Data-driven continuous evolution of autonomous systems**
David Issa Mattos

**#27, RE for Large-Scale Agile System Development**
Eric Knauss

**#29, Agile Verification-Driven Development of Cyber-Physical Systems**
Marjan Sirjani

**#30 Improved test effectiveness via behavioural diversity**
Kristian Sandahl, Jean Malm, Francisco Gomes

**#35, Managing Inconsistent Development Artefacts**
Robbert Jongeling, Jan Carlson

**#37, Communication with stakeholders**
Nataliya Berbyuk Lindström

**#38: Evaluating Sustainability: Making Decisions**
Birgit Penzenstadler, Patricia Lago, Ola Leifler

**#40: On predicting the effects of code changes in continuous software development**
Masud Abu Naser, Shaibal Barua

**Develop, Autoencoders and anomaly detection**
Vasilii Mohsin

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## www.software-center.se

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# Software Center reporting workshop:
# Keynote speakers

## Frances Paulisch: Shifting Gears - Towards Continuous Value Flow

Dr. Frances Paulisch is responsible for the company-wide "Software Initiative" based in the "Development Center" of Siemens Healthineers. A main focus of her work is empowering cross-functional teams to work together well over the whole development lifecycle to achieve speed and flexibility while ensuring quality. This includes a strong focus on continuous delivery and on the associated culture change. In her prior position at Siemens as well as in her current position at Siemens Healthineers, she has been one of the drivers of the company's role-based architecture programs. Frances is also active member of the global software engineering community, playing an active role in various major software conferences such as the International Conference on Software Engineering. She is a member of the Steering Committee of the Software Center. She received a PhD in software engineering from the University of Karlsruhe, her Masters at Purdue University.

## Aleksander Fabijan: Enabling A/B testing at scale:
## It's all about trustworthiness & keeping the momentum

I'm a Data Scientist at Microsoft's Experimentation Platform (ExP) team. Together with a number of others on the team, I enable product teams across Microsoft to run over ten thousand trustworthy AB tests (a.k.a. experiments) on our platform every year. This involves both onboarding product teams to use existing features as well as designing and building new features in our platform to make our lives easier. My background is in Computer Science and I regularly publish and visit conferences in the area of Software Engineering and Data Mining. I have a Ph.D. in Computer Science from Malmö University and a Computer Science degree from University of Ljubljana. My research interests include A/B testing, data, analytics and product management.

In this talk, I will walk us through two of the most important lessons learned in starting and scaling A/B testing. Concretely, I will share practical tips on how to validate your infrastructure through AA tests and Sample Ratio Mismatch checks. I will also introduce the experimentation flywheel to share the practices that help us keep the momentum of A/B testing at scale.

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# Technology themes

### Theme 1: Continuous  Delivery
Theme leader: Professor Kristian Sandahl, Linköping University
kristian.sandahl@liu.se
Theme web page:
https://www.software-center.se/research-themes/technology-themes/continuous-delivery/

### Theme 2: Continuous Architecture & Continuous Delivery
Theme leader: Professor Jan Carlson, Mälardalen University
jan.carlson@mdh.se
+46-21-151722
Theme web page:
https://www.software-center.se/research-themes/technology-themes/continuous-architecture/

### Theme 3: Metrics
Theme leader: Professor Miroslaw Staron, Chalmers & University of Gothenburg
Miroslaw.Staron@cse.gu.se
Phone: +46 31 772 10 81
Theme web page:
https://www.software-center.se/research-themes/technology-themes/development-metrics/

### Theme 4: Customer Data- and Ecosystem-Driven Development
Theme leader: Professor Helena Holmström Olsson, Malmö University
helena.holmstrom.olsson@mau.se, 040-6657319
Theme web page:
https://www.software-center.se/research-themes/technology-themes/customer-data-and-ecosystem-driven-development/

### Theme 5: AI Engineering
Theme leader: Professor Jan Bosch, Chalmers
jan.bosch@software-center.se
031-772 57 16
Theme web page:
https://www.software-center.se/research-themes/technology-themes/ai-engineering/

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