RESEARCH PROJECTS

Scalable distributed data processing
Christian Plewnia

DevOps-aware Software Engineering
Andreas Steffens

ROBUSTA - Combinatorial Robustness Testing
Konrad Fögen

Enterprise Architecture
Roundtrip-Management
Simon Hacks

Enterprise Architecture Debt Management
Peter Alexander / Simon Hacks
**HIGHLIGHTS**

**FEBRUARY: Seminar on Software Testing, TGGS Bangkok**

An industry seminar on *Concepts and Modern Approaches to Software Testing* was organized in the context of the TGGS Software Systems Engineering seminar series.

**MARCH: Workshop Scrum in Industry**

We organized a *Scrum Workshop* in the context of the Software Project Management lecture. There, Frank Linden, a professional Agile Coach from Amadeus IT Leisure Group, interactively taught some important aspects of the Scrum framework. Thanks, for offering this opportunity to our students!
**HIGHLIGHTS**

**MARCH: 4th CSE Workshop in Hamburg**

Co-located with the International Conference on Software Architecture (ICSA’19) we organized the 4th Workshop on Continuous Software Engineering. For the first time, CSE and QUDOS joined forces to foster cross-fertilization and bootstrap an even bigger, stronger community around the urgently emerging topics they are both.

The keynote was given by [Ian Gorton](#)! Thanks to [Andreas Steffens](#) for organizing this event.

**MAY: 137 Years of Software Engineering @ RWTH Aachen**

We celebrated
- 75th birthday of [Prof. M. Nagl](#)
- 20th anniversary of [Prof. H. Lichter](#)
- 10th anniversary of [Prof. B Rumpe](#)
- 32nd anniversary of the Chair Software Engineering
This year Amadeus supported our Bachelor Software Lab. Amadeus provided the tasks students had to solve in the project. The final presentation was given by the students at Amadeus in Würselen. Thanks to Amadeus for offering this opportunity. Christian Plewnia headed this lab.

JULY : Industry Lecture on Quality Assurance at IVU

In the context of the SQA lecture, IVU introduced to the students the challenges of testing large and complex application landscapes and present some developed solutions.

As this lecture was given at the IVU building in Aachen, students were invited to explore the specific test lab of IVU.

Thanks to IVU for offering this opportunity.
HIGHLIGHTS

JULY: Course on Test Cloud Automation at UTM, Johor Bahru

As part of the DAAD-funded project we organized a compact course on Testing and Cloud Automation at Universiti Teknologi Malaysia (UTM).

SEPTEMBER: Ph.D. Defense of Simon Hacks

On September 12, Simon Hacks successfully passed his Ph.D. defense on “Improving the Quality of Enterprise Architectures - Processes and Techniques”.

Thanks to Prof. Pontus Johnson for supporting this defense!

Simon joined KHT Stockholm as Postdoc.

Congratulations!
HIGHLIGHTS

OCTOBER: SWC Trip to Worms

This year, we spontaneously visited Worms and the “Wonnegau”.

NOVEMBER: Visit from UTM Malaysia

As part of the DAAD-funded project "Digital Lifestyle Germany - Malaysia" we welcomed a delegation of the Universiti Teknologi Malaysia (UTM).

In addition to some meetings, visits to various RWTH institutes and the company partner IVU Technologies took place.

Thanks to Andreas Steffen for taking care of our guests.
Collocated with the 26th Asia-Pacific Software Engineering Conference (APSEC 2019), we organized the 7th International Workshop “Quantitative Approaches to Software Quality” (QuASoQ) in Putrajaya.

Konrad Fögen (once again) chaired the workshop!
WHAT ELSE HAPPENED …

SIMON HACKS RECEIVED BEST PAPER AWARD @ ICEIS


COFFEE4J FRAMEWORK PUBLISHED

coffee4j is a Java-based framework, developed by Konrad Fögen, for Combinatorial Test Input Generation and Fault Characterization. It is based on a fast implementation of the well-known IPOG algorithm and supports constraint handling, robustness testing and fault localization.

NEW RESEARCH PROJECT WITH IVU TECHNOLOGIES

In September, we started a new research project with IVU Technologies Aachen. The focus of this project is to improve Test Automation, including test strategy, technology and processes.

Nils Wild, who joined us in July, is in charge of this project.


