



FRAUNHOFER INSTITUTE FOR EXPERIMENTAL SOFTWARE ENGINEERING IESE

## **LECTURERS**









Matthias Naab

Dominik Rost

Balthasar Weitzel Pablo Oliveira

Dr. Matthias Naab, Dominik Rost, Balthasar Weitzel and Dr. Pablo Oliveira Antonino de Assis are software architects. Their expertise – consolidated experiences and lessons learned from more than 100 projects with industry in domains such as Embedded Systems, Information Systems, and Smart Ecosystems - encompasses the definition, improvement, and assessment of software architectures.

The lecturers are working at the Fraunhofer Institute for Experimental Software Engineering IESE in Kaiserslautern. They are responsible for project management, method development, and technology transfer in research and industry projects. They manage research activities in the area of software- and system architectures at IESE and coordinate the work of 25 team members.

In addition, they regularly perform seminars with professionals on the topic of software architecture. They also hold tutorials on this subject at conferences and give lectures at the Fraunhofer Academy and at the University of Kaiserslautern. They have published more than 100 papers and articles in the areas of software architecture, maintenance, and evolution.

### CONTACT

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3-day basic seminar 2,300.00 EUR per person Fees: Advanced training day 4+5\* 1,200.00 EUR per person 5-day full seminar 3,500.00 EUR per person

Included are all seminar materials, drinks, and lunches during the days of the seminar as well as one dinner in the context of a social event. Travel and accommodation costs must be borne by the participants themselves.

#### Venue:

Fraunhofer IESE Fraunhofer-Platz 1 67663 Kaiserslautern, Germany

\* Participation in the advanced seminar requires prior participation in the basic seminar.

# Further information and registration:

 $www.iese.fraunhofer.de/en/seminare\_training/software architecture.html\\$ 

# **SEMINAR SOFTWARE ARCHITECTURE**





### **SOFTWARE ARCHITECTURE**

Architectures are the decisive factor for success in the development and evolution of software systems. Architectures define building plans via the characteristics, the behavior, and the structure of the software.

If used effectively, software architectures allow predictions regarding the achievement of functional and qualitative requirements on the one hand; on the other hand, implementation can be planned and progress can be monitored. And last but not least, architectures also serve to keep systems extensible and adaptable in terms of changes, while adhering to management constraints regarding costs and duration at the same time.

We believe that the development and use of software architectures is a continuous activity that must not stop throughout the entire lifecycle of a system. In practice, however, it is often not clear where and how to use architectures and which methodology and which tools to use in order to achieve improvements.

In addition to the standard seminar "Software Architecture" described in this brochure, we also offer individually designed seminars for your company where the training content is specifically adapted to your needs. Please contact us if you are interested in such a seminar!

### WHAT WE OFFER

The goal of the seminar "Software Architecture" is to train the participants in the typical activities performed by an architect. The seminar is a three-day on-site training session, which can be extended by an additional two days to consolidate the skills learned.

Day 1: Fundamentals of Software Architecture

Day 2: Design (Construction of Architecture Views)

Day 3: Evaluation of Architectures

**Optional: Advanced Seminar on Tools** 

Day 4: Architecture Modeling with Enterprise Architect

Day 5: Evaluation and Reconstruction of Architectures with Fraunhofer SAVE

In addition to building up methodological knowledge, a lot of emphasis will be placed on the practical application of the newly learned skills. Many exercises and interchanges with experts will solidify what the participants have learned. After the seminar, the participants will be able to use the approaches they practiced in their daily work.

The multitude of our projects with industry partners shows that the lightweight approaches presented by us can also be introduced into a company's already existing process land-scapes.

### **HOW YOU CAN BENEFIT**

After the seminar, you will have the knowledge and skills to ...

- use architectures in your company. Our methodology permits the participants to quickly get practical access to the topic of architecture. After the seminar, they will be able to define, use, and evaluate architectures on their own.
- use architectures in a pragmatic manner. Architectures are no end in themselves; therefore, our methodology defines clear application cases. In particular, we emphasize application scenarios for architecture documentation: How to get from the architecture to something that is useful in development and evolution and helpful in daily practice.
- interleave architectures with other software engineering activities. Results and industrial cases show how architectures can be used throughout the entire lifecycle.
- be able to assess technological trends and hypes: The name Fraunhofer stands for the objective presentation of content. Unlike our competitors, we bring a neutral view to the subject.

You want to live the role of a "software architect"? Attend our seminar and benefit from our expertise!