Software is key to effective business processes in more and more industries. As a result, software engineering is already a key capability in modern societies. Software processes are becoming increasingly reliable and effective, but, due to their nature, they are different from production processes.

To understand the nature of software processes, to find appropriate architectures of software systems and to identify the essential and value-creating activities in software development is what software engineering research is about. These questions and the urgent needs for concise answers are very close to industrial software development. That is why software engineering research and high-end software development in practice match naturally.

adesso’s 20-year-anniversary conference ‘The Essence of Software Engineering’ will focus on some of the cornerstone contributions of software engineering research, recognizing the role they have played for adesso’s success in the software industry.

volker gruhn | chairman of the supervisory board | adesso AG
WELCOME SPEECH AND CONFERENCE OPENING
VOLKER GRUHN

WHAT IS SOFTWARE?

Software can aid understanding computer software and help us to develop it better. It tries to be more precise about this. We suggest that laws, recipes, and assembly instructions are needed, why it is needed, how it may be approached, and benefits that could be expected thereof.

Michael Hühne is a professor for Information Systems Technology at Stockholm University in Sweden. He holds the Chair of Software Engineering at Stockholm University. His main research focuses on mobile and ubiquitous computing and he has published more than 200 scientific publications.

RICHARD N. TAYLOR

ONLY THE ARCHITECTURE YOU NEED

A software architecture is a Metamodel of the system. It must be precise, it must be focused, it must be focused, it must be focused, it must be focused, it must be focused, it must be focused, it must be focused, it must be focused, it must be focused.

Bertrand Meyer is University Professor at ETH Zurich and directs the Center for Software Engineering. He co-founded the software components and communication protocol (S/CCP) at Siemens. His research focuses on software architecture and component-based systems. He is an ACM Fellow (1999), an IEEE Fellow (2005), a member of the European Academy of Sciences, and the Zentrum Digitalisierung.Bayern. He received the ACM SIGSOFT Outstanding Research Award (2015) and the QUALCOMM Innovation Prize (2004). He is a member of the Editorial Boards of Software Systems Engineering (2000) and Formal Methods in System Design. Since 2016, he has served as the Founding Dean of the Department of Mathematics and Computer Science at ZIB.

14:40

SOFTWARE SYSTEM ARCHITECTURE SPECIFICATION

Manfred Broy served as the Founding Director of the Institute of Mathematics and Computer Science at the University of Munich in 1981, as well as the Founding Director of the Department of Information Technology at the Technical University of Munich in 1997. He is a member of the Commission of the European Union. Since 2005, he is a member of the ERC Advanced Grant.

15:40

MANAGED BEANS

30:10  RICHARD N. TAYLOR

KTH Royal Institute of Technology, Stockholm | SWEDEN

DEATH TO ALL METHODS - FREE THE PRACTICES

Dr. Ivar Jacobson will revisit the history of methods with method wars and fashionable techniques. He will show how to reach their own way of working that they need today and seamlessly evolve into the one they need tomorrow.

Ivar Jacobson is a co-founder of Object-Oriented Systems, Inc. (OOI), the first company to commercialize the object-oriented approach. He is the author of more than 30 books, including 'Objectory' and the highly acclaimed 'The Unified Software Development Process' (USDP). He is an ACM Fellow, a member of the Royal Swedish Academy of Engineering Sciences, and an honorary member of the Russian Academy of Science.

13:30  BERTRAND MEYER

ETH Zurich | SWITZERLAND

SOFTWARE ENGINEERING

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