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Distinguished Lecturer Series



Professor Wolfgang Reisig Humboldt-Universität zu Berlin, Institut für Informatik, Germany

Towards a conceptual basis for SOC and BP modeling

Abstract: Pushed by business needs and by the software industry, service-oriented computing (SOC) has quickly established itself as a core paradigm of modern software architectures. Business processes heavily rely on this technology. To use it properly, Business Process Modeling (BPM) has become a key issue in this context. I consider various aspects of conceptual foundations of modeling- and analysis techniques for SOC and BP, including

- components with behaviors that purpose not to terminate,
- algorithms that are not to be implemented, but to be executed by technical devices or by humans,
- a most liberal notion of *composition* of components and services,
- specific means to abstractly formulate semantics, properties, correctness criteria, and equivalence.

I do not present completed solutions to the above problems. Instead, I discuss some ideas that could contribute to the conceptual basis for SOC and BP modeling.

Professor Wolfgang Reisig, Theory of Programming Chair Professor of the Humboldt-Universität of Berlin, is the author and editor of several books, including "Elements of Distributed Algorithms" and the recent "Understanding Petri Nets". His research interests include Service Oriented Computing, Business Process Modelling, Distributed Algorithms, and modelling techniques such as Abstract State Machines and Petri Nets. Professor Reisig is a Member of the European Academy of Sciences, he was the Dean of the Faculty of Mathematics and science and the acting director of the department of computer science at Humboldt-Universität.

> 12:30-13:30 on Thursday, February 27, 2014, Harry and Carol Saal Auditorium, Alon Building for Hi-Tech (37/202).