

HPI Kolloquium

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Hasso-Plattner-Institut, Vorlesungsgebäude, Auditorium 1
Prof.-Dr. Helmert-Str. 2-3, 14482 Potsdam-Babelsberg

"A FRAMEWORK AND METHODOLOGY FOR DESIGN SCIENCE"

Prof. Dr. Roel Wieringa

University of Twente (The Netherlands)

Abstract

Design science is the production of useful knowledge about artifacts. Artifacts can be physical products, software products, methods, techniques, notations, languages or anything else made by people for a purpose. Design science iterates over the design of artifacts and the study of their properties in context. Current frameworks for design science tend to conflate the design and research activities and, therefore, miss important design tasks, as well as ignore trade-off analysis and sensitivity analysis in validation research. In this talk Prof. Wieringa will present a framework that can be used by researchers and research project managers to structure their activities, and present a set of methodological guidelines for practicing design researchers that can be used as a checklist in their research practice. The talk is illustrated by a number of research projects supervised by the speaker. In particular, attention will be given to the structure of action research to validate artifacts.

Short-CV

Roel Wieringa is Chair of Information Systems and head of the Computer Science Department at the the University of Twente, the Netherlands. His research interests include value-based requirements engineering, business process modelling, conceptual modelling, and research methodology for requirements engineering. He is scientific director of the School for Information and Knowledge Systems (SIKS, www.siks.nl) that provides advanced education to all Dutch Ph.D. students in information and knowledge systems. He has written two books, Requirements Engineering: Frameworks for Understanding (Wiley, 1996) and Design Methods for Reactive Systems: Yourdon, StateMate and the UML (Morgan Kaufmann, 2003). He has been Associate Editor in Chief of IEEE Software for the area of requirements engineering. He serves on the board of editors of the Requirements Engineering Journal and of the Journal of Software and Systems Modelling. Find more information at <http://www.cs.utwente.nl/~roelw>.

Gastgeber: Prof. Dr. Mathias Weske