Dynamic Analysis of Software Systems with Kieker - A Hands-On Lecture

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Seminar room (ex DIS) – Floor D
Dipartimento di Ingegneria Industriale e dell'Informazione
Università degli Studi di Pavia – Via Ferrata 5 - Pavia

Abstract

Kieker is an extensible open-source framework for monitoring and analyzing the runtime behavior of software systems, e.g., focusing on performance and availability. It is designed to provide reusable and easily extensible components and has been evaluated in several scientific and industrial projects. After providing a brief introduction to dynamic software (performance) analysis, this lecture introduces the Kieker framework and its application for architecture reconstruction and software performance engineering of enterprise systems. Kieker is primarily developed as a research tool in collaboration between Kiel University and University of Stuttgart, but also contains contributions by industrial partners. Kieker is part of the SPEC Research Group's repository of peer-reviewed tools for quantitative system evaluation and analysis. We encourage the audience to bring their own laptops or use the laboratory equipment (with Java) for the hands-on parts of the lecture.

Biography

André van Hoorn is researcher with the Reliable Software Systems Group at the University of Stuttgart, Germany. Before, he was researcher and PhD student with the Software Engineering Groups at Kiel University (Germany) and the University of Oldenburg (Germany). André studied computer science at the University of Oldenburg. His research interests are in the area of architecture-based software performance engineering and online management. He is particularly interested in the combination of measurement-based and model-based/driven techniques. André is involved in the Kieker development since many years. Also, he is contributing to the SPEC Research Group.

Organizer and Ph.D. Coordinator

Prof. M. Calzarossa

Seminar in English.

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