Informatik-Kolloquium

Rheinisch-Westfälische Technische Hochschule Aachen
Lehrstuhl für Informatik II

RWTH

EINLADUNG

Zeit: Montag, 22. Januar 2001, 17.00 Uhr

Ort: Raum AH I, Ahornstr.55 (ehem. PH)

Referent: Dilian Gurov, Swedish Institute of Computer Science, Stockholm

Thema: Verification of Erlang Programs

Abstract:

Software written for telecommunication applications has to meet high quality demands. Such software is often highly concurrent, and testing is not by itself sufficient to ensure reliability requirements are met. At the Ericsson corporation the functional language Erlang has been developed for programming telecommunication applications. Today many commercially available products offered by Ericsson are partly programmed in Erlang.

This talk presents an overview of the main theoretical and practical achievements of ErlVer, a collaborative project between the Code Verification Group group at the Swedish Institute of Computer Science and the Ericsson Computer Science Laboratory, and funded by the ASTEC (Advanced Software Technology) competence center. I will present and motivate a verification framework for parametric, compositional and inductive reasoning, consisting of a formal semantics for Erlang, a property specification language, and a proof system. Then I will describe the Erlang Verification Tool, its implementation, support for semi-automatic proof search, graphical user interface, and the case studies it has been applied to so far. The talk concludes with a summary of the academic and industrial impact of the ErlVer project, and with visions for its future.

Es laden ein: Die Dozenten der Informatik