

Einladung

zum Informatik-Kolloquium des
AB Programmiersprachen und Übersetzer am
Montag, den 7. März 2011, um 14 Uhr c.t.
in der Bibliothek E185.1, Argentinierstr. 8, 4. Stock (Mitte)

Es spricht

Prof. Dr. Kokichi Futatsugi

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über

Combining Inference and Search in Verification with CafeOBJ

One of the most important technical issues in current system verification is how to combine inference (a la interactive theorem proving) and search (a la automatic model checking) in an effective and efficient way.

CafeOBJ is a most advanced algebraic formal specification language system with rewriting/reduction engine which can be used for interactive verification. CafeOBJ also has a searching facility which can be used to search all reachable states of a system to check whether some property holds for all reachable states. We have been developing an interactive verification method with proof scores in CafeOBJ, and are currently trying to combine this method with the searching to achieve more powerful verification method.

In this talk, our current achievement of combining inference and search in verification is explained by using a simple but non-trivial example of mutual exclusion protocol.

Biography: Kokichi Futatsugi has been a professor of JAIST since 1993. Before getting a full professorship at JAIST, he worked at ETL (Electrotechnical Laboratory), MITI (Ministry of International Trade and Industry), Japanese Government and was appointed the Chief Researcher of ETL in 1992. He worked also at SRI International (Stanford Research Institute), California for 1983-1984 as a visiting researcher. His research interests include formal specification languages, formal methods, systems verifications, software requirements/specifications, and his current research activities are centered around formal specification and verification based on CafeOBJ (an executable formal specification language). He got a Fellow Award of Japan Society for Software Science and Technology in 2008, and is now adviser/editor of international journals like IJSI (www.ijsi.org), JAL (www.elsevier.com/locate/jal), and JHOSC (www.springerlink.com/content/102420/).

(<http://www.jaist.ac.jp/~kokichi/>)

Zu diesem Vortrag lädt der *Arbeitsbereich für Programmiersprachen und Übersetzer am Institut für Computersprachen* herzlich ein.

Tea: 13:30 Uhr in der Bibliothek E185.1, Argentinierstr. 8, 4. Stock (Mitte).