INFORMATIK-KOLLOQUIUM

AB Programmiersprachen und Übersetzer Institut für Computersprachen



Einladung

zum Informatik-Kolloquium des AB Programmiersprachen und Übersetzer am

Mittwoch, den 4. November 2009, um 10:00 Uhr c.t.

im Kontaktraum, Elektrotechnik, Gußhausstraße 25-29 (Neubau), Stiege 1 (6. Stock)

Es spricht

Prof. Dr. Uwe Aßmann

Technische Universität Dresden, Deutschland

über

Collaboration-Based Composition of Languages

Abstract:

To achieve compositionality for languages, we transfer the notion of collaboration-based design from software modelling to language design. In software modelling, collaboration schemes (also called role models) describe interactions between model concepts, encapsulating the interactions so that they can be reused in different scenarios. While collaboration schemes have been successfully used for system models, they have not yet been applied to language design, for which they provide a huge potential: they can describe the interaction of language concepts from different language components, explain and constrain their interplay, and adapt them to each other, even if they had not been designed for each other. Hence, the use of collaboration schemes in language design paves the way to a new flexible technique for the composition of languages from off-the-shelf components.

Biography: Uwe Aßmann holds the Chair of Software Engineering at the Technische Universitt Dresden. He is the inventor of invasive software composition (ISC), a technology for the composition of program fragments for extreme software reuse. ISC provides a unified technology for generic, connector-, view-, and aspect-based programming, and works for arbitrary program or modeling languages. The technology is demonstrated by the Reuseware environment (http://www.reuseware.org). Roles are in Prof. Aßmann's research interest. Because roles can be merged into classes, role modeling forms a grey-box component model in the spirit of invasive software composition. (http://www1.inf.tu-dresden.de/~ua1/)

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

Tee: 09:30 Uhr in der Bibliothek E185.1, Argentinierstr. 8, 4. Stock (Mitte).