Informatik-Kolloquium

Rheinisch-Westfälische Technische Hochschule Aachen
Lehrstuhl für Informatik VII

EINLADUNG

Zeit: Mittwoch, 19.11.2003, 17.00 Uhr

Ort: AH VI, Ahornstr. 55

Referent: Professor Stefano Crespi Reghizzi
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Titel: **Formal language definition by associations instead of grammars**

Abstract:

The new Associative Language Description (ALD) model, a combination of local testability and Chomsky's constituent structures, provides a simple description of most relevant context-free languages. ALD excludes mathematical sets based on counting properties, which rarely (if ever) occur as constructs of technical and natural languages. An ALD is a non-generative device which defines a set of trees by local acceptance tests, without using nonterminal symbols. Inferring such a definition from examples of phrase structures is an easy job.

Larger languages (e.g. Pascal or Java) can be concisely defined by grouping the local tests. Formal properties of the ALD family have been studied, but an important problem remains open. Earley's context-free parsing algorithm has been redesigned for this setting. The ALD model has been proposed as an approach consistent with current views on brain organization.

Es laden ein: Die Dozenten der Informatik