Informatik-Kolloquium

Rheinisch-Westfälische Technische Hochschule Aachen
Lehrstuhl für Hochleistungsrechnen

EINLADUNG

Zeit: Donnerstag, 29. November 2001, 17.00 Uhr

Ort: Raum 5054, Ahornstr.55

Referent: Dr. Laurent Hascoet

Thema: The Odyssee Automatic Differentiation tool

Abstract:

The "Tropics" team at INRIA Sophia-Antipolis (http://www.inria.fr/recherche/equipes/tropics.en.html) is developing the "Odyssee" Automatic Differentiation tool. A major focus of this tool is an efficient implementation of the so-called reverse mode of automatic differentiation which, in effect, requires a reversal of the control flow of original program. We describe the overall design of Odyssee, which incorporates a language-independent internal representation that is suitable for most classical imperative languages and permits the use of classical compiler techniques to deduce at translation time information useful for an efficient implementation of the reverse mode. We also show how a control-flow driven reversal can be implemented effectively.

Es laden ein: Die Dozenten der Informatik