computer
languages

Einladung

zum Informatik-Kolloquium des
AB Programmiersprachen und Übersetzer am
Donnerstag, den 23. Januar 2014, um 14:00 Uhr c.t.
Hörsaal EI5 Hochenegg, Elektrotechnik, Gußhausstraße 25-29 (Altbau), 2. Stock

Es spricht

Dr. Michael Gschwind

IBM Corp., Poughkeepsie, NY, USA

über

Open Power and Power8

In this talk I will be describing a major new industry collaboration initiative for joint innovation around the Power architecture with the formation of the Open Power consortium, and provide a preview of Power8, the first processor to be released in support of this initiative and the new Open Power ABI. The Open Power consortium is drawing its membership from a diverse set of members such as data center operators (Google), networking solution vendors (Mellanox), graphics companies (Nvidia) and system vendors (Tyan) to bring together innovators to jointly create next generation systems.

The new Power8 processor contains support for transactional memory, enhanced support for dynamic system optimization, big data and business analytics applications. In addition, the new CAPI accelerator interface provides system users with the ability to tightly integrate application-specific accelerators into Power Systems.

As part of the Open Power initiative, we are helping to create a new Open Power ecosystem based on an open source stack built on KVM and Linux. To simplify porting of legacy applications from the Intel architecture, the new environment will be using little-endian data format to enable portability of data to the new platform. In support of this new platform and to enhance exploitation of the Power architecture, IBM also recently released a new Open Power ABI, the Open Power ELFv2 ABI as the first major update to the Power ABI in two decades.

Biographie: Dr. Michael Gschwind is a Senior Technical Staff Member and Senior Manager of System Architecture in the IBM Systems and Technology Group. In his dual role as a technical leader and manager, he is responsible for leading the architecture evolution of IBM's mainframe System z and Power systems and manages the architecture teams for both System z and Power brands. Previously, Dr. Gschwind served as Blue Gene Floating Point Chief Architect and Lead. Dr. Gschwind served as IFU and IDU lead and chief microarchitect for the Komal core which is the foundation for Power7 systems and as architecture lead for Productive, Easy-to-use, Reliable Computing Systems (PERCS) for DARPA's High Productivity Computing Systems (HPCS) initiative where he served as lead architect for IBM's vector/scalar SIMD architecture (VSX). Dr. Gschwind helped initiate the Cell project, served as one of its lead architects for the Cell definition, developed the first Cell compiler and served as technical lead for the software team. He also helped create the Xbox360 chip. Dr. Gschwind received his PhD from Technische Universität Wien. Dr. Gschwind is an IEEE Fellow, an IBM Master Inventor and a member of the IBM Academy of Technology and was named as an industry-leading "IT Innovator and Influencer" by InformationWeek in 2006. (http://researcher.watson.ibm.com/researcher/view_person_subpage.php?id=3796)

Zu diesem Vortrag lädt der *Arbeitsbereich für Programmiersprachen und Übersetzer am Institut für Computersprachen* herzlich ein.
Tee: 13:30 Uhr in der Bibliothek E185.1, Argentinierstr. 8, 4. Stock (Mitte).