

Short CV

Prof. Siegfried Benkner

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Head, Scientific Computing Research Group

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Education

1988 MSc Degree, Computer Science, Vienna University of Technology
1994 PhD Degree, Computer Science, Vienna University of Technology
2000 Habilitation, Computer Science, University of Vienna

Professional Experience

1983 – 1985 Software Developer (free lance), ENGEL AUSTRIA GmbH
1988 – 1990 Software Engineer, SIS - GmbH, Vienna, Austria
1990 – 1991 Research Assistant, University of Vienna,
Institute for Statistics and Computer Science
1991 – 1998 Assistant Professor, University of Vienna,
Institute for Software Technology and Parallel Systems
1996 – 1998 Technical Director, EU FP5 Project HPF+
1998 – 1999 Research Staff Member, NEC Europe Ltd., St. Augustin, Germany
1999 – 2001 Assistant Professor, University of Vienna, Institute for Software Science
2001 – 2010 Associate Professor, University of Vienna,
Institute for Software Science / Department of Scientific Computing
2002 – 2004 Head of Institute, Institute for Software Science, University of Vienna
2005 – 2010 Department Head, Department of Scientific Computing, University of Vienna
2010-2012 Coordinator EU FP7 Project PEPPER
Since 2011 Full Professor for Scientific Computing – Parallel and Distributed Systems,
University of Vienna
Since 2011 Head of Scientific Computing Research Group, Faculty of Computer Science,
University of Vienna

Main Research Areas

- **Parallel and High Performance Computing**
 - Programming paradigms and languages
 - Compilers and runtime systems
 - Programming environments and support tools
- **Cloud Computing, IoT, Big Data**
 - Development environments for Cloud and IoT infrastructure
 - Service-oriented architectures and middleware
 - Data Management, Data integration, Big Data
- **Algorithms and Applications for Parallel and Distributed Systems**

Software infrastructures and algorithms for scientific and industrial applications on parallel systems and distributed systems.

Research and Cooperation Projects (selected)

Dynamic Runtime Systems for Future Parallel Architectures

Austrian Science Fund (FWF), April 2017 – March 2020; Role: Project Lead

CHIPSET – High-Performance Modelling and Simulation for Big Data Applications

European Commission, ICT COST Action IC1406: April 2015 – April 2019

Role: Management Committee Member

VPH-SHARE – Virtual Physiological Human: Sharing for Healthcare - A Research Environment

European Commission, ICT-2009.5.3-269978: March 2011 – May 2015; Role: Project partner

AUTOTUNE - Automatic Online Tuning

European Commission, ICT-2011.3.4-288038, Oct 2011 – April 2015

Role: Project Partner, Workpackage Leader

PEPPER - Performance Portability and Programmability for Heterogeneous Many-core Architectures

European Commission, ICT-2009.3.6-248481, Jan 2010 – Dec 2012; Role: Project Coordinator

@neurIST – Integrated Biomedical Informatics for the Management of Cerebral Aneurisms

European Commission, IST FP6 Project IST-2004-027703; January 2006 – March 2010

Role: Project partner, Member of Architecture Board

RETIDA - Real-Time Data Analytics in the Mobility Domain

Austrian Research Promotion Agency, ICT of the Future; July 2015 – December 2016

Role: Project partner

GEMSS – Grid-Enabled Medical Simulation Services

IST FP5 Project IST-2001-37153; September 2002 - February 2005

Role: Project partner, Member of Project Management Board and Workpackage Leader

Publications

More than 150 peer-reviewed publications in international journals and conference proceedings. See: <http://homepage.univie.ac.at/siegfried.benkner/plist.html>

Reviewing Activities for International Journals (selected)

- IEEE Transactions on Parallel and Distributed Systems (IEEE)
- Journal of Parallel and Distributed Computing (Elsevier)
- Future Generation Computer Systems (Elsevier)
- Concurrency and Computation: Practice and Experience (Wiley)
- International Journal of High Performance Computing Applications (Sage Publishers)

Reviewing Activities for Funding Organizations and Universities (selected)

- European Commission; Reviewer and Evaluator for FP7 and H2020
- National Foundation for Science Higher Education and Technological Development of the Republic of Croatia; Reviewer
- Research Grants Council Hong Kong; Reviewer
- Netherlands Organisation for Scientific Research (NWO), Innovational Research Incentives Scheme; Evaluator
- KTH Stockholm; Selection committee member for assistant professors

Organization of Conferences and Workshops (selected)

- International Conference on Parallel Processing ICPP 2009, Vienna, Austria; Program Co-Chair
- Dagstuhl Seminar on Automatic Application Tuning for HPC Architectures; 2013, Dagstuhl, Germany; General Co-Chair
- International Workshop on Multi/many-Core Computing Systems (MuCoCos 2014), Porto, Portugal, in conjunction with Euro-Par 2014; Program Chair
- International Workshop on Runtime Systems for Extreme Scale Programming Models and Architectures (RESPA 2015), Austin, Texas, USA; Co-Organizer
- Principles and Practice of Parallel Programming (PPoPP 2018), Vienna, Austria, Workshop Chair.

Program Committee Memberships (selected)

Served on more than 100 program committees of international conferences/workshops.

- International Conference for High-Performance Computing, Networking, Storage and Analysis (Supercomputing)
- International Conference on Parallel Architectures and Compilation Techniques (PACT)
- International Parallel & Distributed Processing Symposium (IPDPS)
- Euro-Par International Conference on Parallel Processing
- International Conference on High Performance and Communications (HPCC)