Preface

Euro-Par Conference Series

The European Conference on Parallel Computing (Euro-Par) is an international conference series dedicated to the promotion and advancement of all aspects of parallel and distributed computing. The major themes fall into the categories of hardware, software, algorithms, and applications. This year, new and interesting topics were introduced, like Peer-to-Peer Computing, Distributed Multimedia Systems, and Mobile and Ubiquitous Computing. For the first time, we organized a Demo Session showing many challenging applications.

The general objective of Euro-Par is to provide a forum promoting the development of parallel and distributed computing both as an industrial technique and an academic discipline, extending the frontiers of both the state of the art and the state of the practice. The industrial importance of parallel and distributed computing is supported this year by a special Industrial Session as well as a vendors’ exhibition. This is particularly important as currently parallel and distributed computing is evolving into a globally important technology; the buzzword Grid Computing clearly expresses this move. In addition, the trend to a mobile world is clearly visible in this year’s Euro-Par.

The main audience for and participants at Euro-Par are researchers in academic departments, industrial organizations, and government laboratories. Euro-Par aims to become the primary choice of such professionals for the presentation of new results in their specific areas.

Euro-Par has its own Internet domain with a permanent Web site where the history of the conference series is described: http://www.euro-par.org. The Euro-Par conference series is sponsored by the Association for Computer Machinery (ACM) and the International Federation for Information Processing (IFIP).

Euro-Par 2003 at Klagenfurt, Austria

Euro-Par 2003 was organized by the Institute of Information Technology, University of Klagenfurt, Austria. The conference location was the University of Klagenfurt which provided a convenient and stimulating environment for the presentation and discussion of recent research results.

A number of tutorials and invited talks extended the regular scientific program. Euro-Par 2003 invited five tutorials: Project JXTA: An Open P2P Platform Architecture (Bernard Traversat, Sun Microsystems); Grid Computing with Jini (Mark Baker, University of Portsmouth, and Zoltan Juhasz, University of Veszprem); Pervasive Computing (Alois Ferscha, University of Linz); Carrier Grade Linux Platforms (Ibrahim Haddad, Ericsson Research); and A Family of
Multimedia Representation Standards: MPEG-4/7/21 (Fernando Pereira, University of Technology Lisbon, and Hermann Hellwagner, University of Klagenfurt).

Invited talks were given by C.A.R. Hoare (Microsoft Research and Oxford University) on *The Verifying Compiler*; Jim Miller (Microsoft Research) on *Lessons from .NET*; Stefan Dessloch (Kaiserslautern University of Technology) on *Databases, Web Services, and Grid Computing*; and Henri E. Bal (Vrije Universiteit, Amsterdam) on *Ibis: A Java-Based Grid Programming Environment*. The first two invited speeches were in common with the co-located *Fifth Joint Modular Languages Conference (JMLC 2003)*, the main track of which took place prior to Euro-Par 2003 at the same venue.

The co-location of both conferences motivated us to organize a special “event” in the conference week: a memorial panel and an exhibition in honor of the recently deceased great computer scientists Ole-Johan Dahl, Edsger W. Dijkstra, and Kristen Nygaard. The virtual part of the exhibition has been made available for everybody via the Euro-Par 2003 Web site: [http://europar-itec.uni-klu.ac.at/](http://europar-itec.uni-klu.ac.at/).

**Euro-Par 2003 Statistics**

The format of Euro-Par 2003 followed that of the previous editions of the conference and consisted of a number of topics, each of them monitored by a committee of four members. In this year’s conference, there were 19 topics, four of which were included for the first time: Mobile and Ubiquitous Computing (Topic 15), Distributed Systems and Distributed Multimedia (Topic 16), Peer-to-Peer Computing (Topic 18), and a Demo Session (Topic 19) for the presentation of applications. The call for papers attracted 338 submissions, of which 159 were accepted. 103 were selected as regular papers and 52 as research notes. It is worth mentioning that four of the accepted papers were considered to be distinguished papers by the program committee. In total, 1233 review reports were collected, an average of 3.72 per paper.

Submissions were received from 43 countries (based on the corresponding author’s country), 29 of which were represented at the conference. The principal contributors by country were USA (25 accepted papers), Germany and Spain (each 21 accepted papers), and France (15 accepted papers).

**Acknowledgments**

A number of institutions and many individuals, in widely different respects, contributed to Euro-Par 2003. We thank for their generous support of the University of Klagenfurt; the Carinthian Economic Fund (KWF); the Carinthian International Campus for Science and Technology (Lakeside Park); the City of Klagenfurt; the Austrian Ministry of Education, Science and Culture (bm:bwk); the Austrian Ministry of Transportation, Innovation and Technology (bmvit); and
the Austrian Computer Society (OCG). The sponsor companies, Microsoft Research, Hewlett-Packard, Quant-X, UnQUARE, IBM, ParTec, Sun Microsystems and the Verein der Freunde der Informatik@University of Klagenfurt provided the financial background required for the organization of a major conference. Finally, we are grateful to Springer-Verlag for publishing this proceedings.

We owe special thanks to all the authors for their contributions, members of the topics committee (more than 70 persons), and the numerous reviewers for their excellent work, ensuring the high quality of the conference.

We are especially grateful to Christian Lengauer, the chair of the Euro-Par steering committee, who gave us the benefit of his experience in the 18 months leading up to the conference.

Last, but not least, we are deeply indebted to the local organization team for their enthusiastic work, especially Martina Steinbacher, Mario Döller, Mulugeta Libsie, Angelika Rossak and the technical staff of our institute.

We hope that all participants had a very enjoyable experience here in Klagenfurt, Austria, at Euro-Par 2003!

Klagenfurt, June 2003

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