Radu Prodan

Personal Information

Position	University Professor
Affiliation	Institute of Information Technology, University of Klagenfurt
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Education

09/2009	Privatdozent (Habilitation), University of Innsbruck, Austria
11/2004	Doctor of Technical Sciences, Vienna University of Technology, Austria
07/1997	Diploma Engineer, Technical University of Cluj-Napoca, Romania

Academic Positions

02/2018 –	Institute of Information Technology, University of Klagenfurt, Austria
09/2004 –	Institute of Computer Science, University of Innsbruck, Austria
01/2001 – 08/2004	Institute of Computer Science, University of Vienna, Austria
12/1999 – 12/2000	Swiss Scientific Computing Centre, Manno, Switzerland
12/1997 – 11/1999	Institute of Computer Science, University of Basel, Switzerland
02/1997 – 11/1997	Swiss Federal Institute of Technology Zurich, Switzerland

Research Interests

Parallel and distributed systems

Cloud computing

High-performance scientific computing

Performance tools

Scheduling and optimisation

Compiler technology

Energy efficiency

Research Grants

2018 – 2020	ASPIDE: Exascale ProgramIng Models for Extreme Data Processing, Workpackage leader, European Commission, 801091, € 382.437,50
2015 – 2019	Tiroler Cloud: A Federated Energy-aware Cloud for Industrial, Business, and Scientific Applications, Coordinator, Austrian Research Promotion Agency (FFG), 5077019, € 318.800
2015 – 2018	ENTICE: Decentralized Repositories for Transparent and Efficient Virtual Machine Operations, Scientific coordinator, European Commission, 644179, € 789.750

2014 – 2017	eRamp: Excellence in Speed and Reliability for More than Moore Technologies, ENIAC Joint Undertaking, IC1305, € 273.206,1
2013 – 2017	Workflows on Manycore Processors, Coordinator, Austrian Science Fund (FWF), TRP 237-N23, € 349.718,04
2011 – 2013	RainCloud: Scientific Computing in the Cloud, Coordinator, Standortagentur Tirol, € 292.118,43, Tiroler Wissenschaftsfonds, UNI-0404/931, € 4.000
2011 – 2013	On-Demand Resource Provisioning for Online Games, Coordinator, Austrian Science Fund (FWF), TRP 72-N23, € 301.168,83
2010 – 2012	SHIWA: Sharing Interoperable Workflows for Large-Scale Scientific Simulations on Available DCIs, Workpackage leader, European Commission, 261585, € 243.735
2010 – 2012	OpenCore: A Many-core Compiler for Industrial Engineering Stability Analysis, Coordinator, Austrian Research Promotion Agency (FFG), 824925, € 211.100,00
2006 – 2009	edutain@grid: A Scalable QoS-enabled Business Grid Environment for Multi-User Real-time Online Interactive Applications, Workpackage leader, European Commission, IST-034601, € 481.411

Project Involvement

2014 – 2018	Network for Sustainable Ultrascale Computing (NESUS), ICT COST Action IC1305, Working group coleader
2014 – 2017	EASE: Energy-Aware Autotuning for Scientific Applications, I-1523, Austrian Science Fund (FWF) and Department of Science and Technology (DST) India
2009 – 2011	Parallel Computing with Java for Manycore Computers, Tiroler Zukunftsstiftung
2007 – 2008	CoreGRID Network of Excellence, IST-004265, European Commission
2004 – 2009	EGEE: Enabling Grids for E-science in Europe, IST-2003-508833, European Commission
2004 – 2009	Austrian Grid, BMWF-10.220/0002-II/10/2007
2004 – 2007	K-Wf Grid: Knowledge-based Grid Workflows, IST-2002-511385, European Commission
2001 – 2007	AURORA: Advanced Models, Applications and Software Systems for High Performance Computing, SFBF1104, Austrian Science Fund (FWF)
2001 – 2004	APART: Automatic Performance Analysis: Real Tools, IST-2000-28077, European Commission
1997 – 2000	FIRST: Framework for Interoperable Resources, Services, and Tools, SNF-2100-049550, Swiss National Science Foundation (SNSF)

Awards

2016	Best Paper Award, 9th IEEE/ACM International Conference on Utility and Cloud Computing, Shanghai, China
2003	Best Paper Award, 17th International Parallel and Distributed Processing Symposium, IEEE Computer Society, Nice, France
2003	Student Travel Award, 8th Global Grid Forum, Seattle, USA
2002	Student Paper Award. 31st International Conference on Parallel Processing, IEEE Computer Society, Vancouver, Canada
2000	Student Travel Award, 9th High-Performance Distributed Computing Conference, IEEE Computer Society, Pittsburgh, USA

1997	Best Student Award. 1992 – 1997 series of graduates, Technical University of Cluj-Napoca, Romania

Research Stays

2014	St. Xavier's Catholic College of Engineering, Chunkankadai, Nagercoil, India, EASE project, 2 weeks
2003	Paul Scherrer Institute, Villigen, Switzerland, AURORA project, 2 weeks
1998	Swiss Scientific Computing Centre, Manno, Switzerland, FIRST project, 2 months
1998	University of Wisconsin-Madison, USA, FIRST project, 1 month

Program Committee Memberships

2017	International Symposium on High-Performance Distributed Computing, ACM
2016	International Symposium on Parallel and Distributed Processing with Applications, IEEE
2016	International Conference on Algorithms and Architectures for Parallel Processing, Springer
2016	Supercomputing, ACM
2016	Cloud Computing Technoeconomic Engineering Workshop, IEEE
2016	International Symposium on Cluster, Cloud and Grid Computing, IEEE Computer Society
2016	International Conference on Green High Performance Computing, IEEE Computer Society
2015	International Conference on Green Computing and Communications, IEEE Computer Society
2015	International Conference on Data Science and Data Intensive Systems, IEEE Computer Society
2015 – 2016	International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, WordPress
2015 – 2016	International Conference on Future Internet of Things and Cloud, IEEE Computer Society
2015	International Workshop on Quality of Service Assurance in the Cloud, IEEE Computer Society
2015 – 2017	International Conference on Economics of Grids, Clouds, Systems and Services, Springer
2015	International Conference on Big Data and Cloud Computing, IEEE Computer Society
2015	International Conference on Cloud Engineering, IEEE Computer Society
2014	International Conference on Sustainable Computing and Communications, IEEE Computer Society
2014	International Symposium on Computer Architecture and High Performance Computing, IEEE Computer Society
2014	Techniques and Applications for Sustainable Ultrascale Computing Systems, Springer
2014	Special Session on P2P and Cloud Collaborative Systems and Virtual Worlds, IEEE Computer Society

2014	International Symposium on Computer Architecture and High Performance Computing, IEEE Computer Society
2014	Euromicro Conference series on Software Engineering and Advanced Applications, IEEE
2014	Workshop on Techniques and Applications for Sustainable Ultrascale Computing Systems, Springer
2014 – 2016	International Conference on Cloud Computing Technology and Science, IEEE Computer Society
2014	IEEE Cluster
2014	International Conference on Collaboration Technologies and Systems, IEEE
2013	D-A-CH Energieinformatik Konferenz
2013	IFIP International Conference on Network and Parallel Computing, Springer
2013 – 2014	World Conference on Information Systems and Technologies, Springer
2012 – 2014	International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, Conference Publishing Service
2012	International Workshop on Scalable Computing for Big Data Analytics, IEEE Computer Society
2012 – 2016	International Conference on Smart Cities and Green ICT Systems, SciTePress
2011	International Workshop on Fault Tolerant Architectures for Reliable Distributed Infrastructures and Services, IEEE Computer Society
2011 – 2012	International Conference on Cloud and Green Computing, IEEE Computer Society
2010 – 2016	Workshop on Workflows in Support of Large-Scale Science, ACM
2010 – 2016	International Conference on Computational Science and Engineering, IEEE Computer Society
2010 – 2016	International Conference on Utility and Cloud Computing, IEEE Computer Society
2010 – 2013	International Conference on Computer and Information Technology, IEEE Computer Society
2010 – 2012	International Conference on Cluster Computing and the Grid, IEEE Computer Society
2009 – 2014	Euromicro Conference on Parallel, Distributed, and Network-based Processing, IEEE Computer Society
2009	Grid Applications and Middleware Workshop, Springer
2009 – 2010	International Conference on Cloud Computing, IEEE Computer Society
2007 – 2010	International Conference on Advanced Information Networking and Applications, IEEE Computer Society
2006 – 2011	International Multi-Conference on Computing in the Global Information Technology, IEEE Computer Society
2009 – 2013	International Workshop on Workflow Management in Service and Cloud Computing, IEEE Computer Society
2009	Grid Applications and Middleware Workshop, Springer
2009 – 2015	International Conference on High Performance Computing and Simulation, IEEE Computer Society
2008-2010	International Conference on Parallel and Distributed Systems, IEEE Computer Society

2008	International Conference on Computer Engineering and Systems, IEEE Computer Society
2008 – 2009	Workshop on Real-Time Online Interactive Applications on the Grid, Springer
2008	International Conference on High Performance Computing and Communications, IEEE Computer Society
2008 – 2014	Euro-Par Conference, Springer
2008	International Workshop on Workflow Management and Applications in Grid Environments, IEEE Computer Society
2007	International Grid Conference, IEEE Computer Society
2006	Austro-Hungarian Workshop on Distributed and Parallel Systems, Springer

Journal Reviews

2017	IEEE Transactions on Internet Technology
2017	IEEE Access
2016	Energies, Multidisciplinary Digital Publishing Institute
2016	Future Internet, Multidisciplinary Digital Publishing Institute
2016	Journal of Computer Networks and Communications, Hindawi
2015	Peer-to-Peer Networking and Applications, Springer
2015 – 2016	IEEE Transactions on Services Computing
2015	International Journal of Computational Science and Engineering, Inderscience
2015 – 2017	Computing, Springer
2014	Journal of the Operational Research Society of India, Springer
2014	International Journal of High Performance Computing, SAGE Publications
2014 – 2015	IEEE Transactions on Circuits and Systems for Video Technology
2014 – 2015	IEEE Transactions on Computers
2014 – 2015	Computer Networks, Elsevier
2014 – 2016	Sustainable Computing, Informatics and Systems, Elsevier
2014	International Journal of Cloud Computing, Inderscience
2014	Computers & Electrical Engineering, Elsevier
2014 – 2017	The Computer Journal, Oxford University Press
2014	Expert Systems With Applications, Elsevier
2013 – 2015	IEEE Transactions on Cloud Computing
2013	ACM Transactions on Embedded Computing Systems
2013 – 2017	Cluster Computing, Springer
2013 – 2014	Computational and Mathematical Methods in Medicine, Hindawi
2013	Applied Mathematics & Information Sciences
2013	IEEE Transactions on Network and Service Management
2013 – 2016	Journal of Systems and Software, Elsevier
2013	Simulation Modelling Practice and Theory, Elsevier

2013	Algorithms, Open Access Journal
2012	EURASIP Journal on Wireless Communications and Networking, Springer
2012	Journal of Computers, Academy Publisher
2012	International Journal of Computers and Their Applications, International Society for Computers and Their Applications
2012	Scientia Iranica, Elsevier
2011	IEEE Transactions on Modeling and Computer Simulation
2011 – 2012	IEEE Internet Computing
2011 – 2013	International Journal of Grid and Utility Computing, Inderscience
2011	Computers in Entertainment, ACM
2011	Personality and Individual Differences, Elsevier
2011	Advances in Software Engineering, Hindawi Publishing Corporation
2010 – 2012	IEEE Communication Letters
2010 – 2014	Software: Practice and Experience, John Wiley & Sons
2010 – 2015	International Journal of Information Technology and Decision Making, World Scientific
2009 – 2016	Journal of Parallel and Distributed Computing, Elsevier
2009	IEEE Internet Computing
2009 – 2015	Journal of Grid Computing, Springer
2009	Journal of Numerical Analysis, Industrial and Applied Mathematics, European Society of Computational Methods in Sciences and Engineering
2009 – 2011	International Journal of Parallel, Emergent and Distributed Systems, Taylor & Francis
2008 – 2017	IEEE Transactions on Parallel and Distributed Systems
2008 – 2009	Journal of Scheduling, Elsevier
2008 – 2009	Parallel Computing, Elsevier
2007 – 2017	Future Generations Computer Systems, Elsevier
2006 – 2017	Concurrency and Computation: Practice and Experience, John Wiley & Sons
2007 – 2014	Scientific Programming, IOS Press
2008	International Journal of High-Performance Computing Applications, SAGE Publications
2008	International Journal of Autonomous and Adaptive Communication Systems, Inderscience Publishers
2008	IEEE Transactions on Automation Science and Engineering

Project Reviews

2016 – 2017	National Science Center, Poland
2015	French National Research Agency, FLAG-ERA Human Brain Project Scientific Evaluation Panel
2014 – 2016	Swiss National Science Foundation
2014	National Center of Science and Technology Evaluation, Republic of Kazakhstan

2014	Austrian Agency for International Cooperation in Education and Research (OeAD-GmbH), Austria
2014	Ministry of Business, Innovation & Employment, New Zealand
2014	Agency for Innovation by Science and Technology (IWT), Belgium
2014	Natural Sciences and Engineering Research Council of Canada
2012	Croatian Science Foundation
2010	National Foundation for Science, Higher Education and Technological Development of the Republic of Croatia

Editorial activities

2015 –	Associate editor, IEEE Transactions on Parallel and Distributed Systems

Conference/Workshop/Poster/Tutorial Organisation

2017	International Symposium on Parallel and Distributed Computing, General chair, IEEE
2016	International Symposium on High-Performance Parallel and Distributed Computing, Posters co-chair, ACM
2016	ACM/SPEC International Conference on Performance Engineering, Tutorials co-chair, ACM
2016	Workshop on Adaptive Resource Management and Scheduling for Cloud Computing, Co-chair, ACM
2015 – 2016	International Conference on Future Internet of Things and Cloud, Track chair, IEEE
2013 – 2015	Workshop on Federative and Interoperable Cloud Infrastructures, Co-chair, Springer
2013 – 2016	Workshop on Large Scale Distributed Virtual Environments on Clouds and P2P, Co-chair, Springer
2013 – 2014	International Symposium on Cluster, Cloud and Grid Computing, Tutorials co-chair, IEEE
2009	2nd Workshop on Real-Time Online Interactive Applications on the Grid, Workshop chair, Springer

External PhD/Habilitation Reviews and Examinations

2017	University of Pisa, Italy
2016	University of Ljubljana, Slovenia
2016	West University of Timisoara, Romania
2015	Free University of Bozen-Bolzano, Italy
2015	École normale supérieure de Lyon, France
2015	Swinburne University of Technology, Australia
2014	École Normale Supérieure de Lyon, France
2014	Swinburne University of Technology, Melbourne
2014	University of Grenoble, Grenoble INP/LIG Laboratory
2012	University of Sidney, Graduate School of Engineering & IT, Faculty of Engineering & IT

2009	University of Melbourne, Graduate school

Professional Memberships

Association for Computing Machinery (ACM UK63796)

Institute for Electrical and Electronics Engineers (IEEE 41306148)

Open Grid Forum (GGF ST03-764)

Teaching

2011 – 2017	Introduction in the Practical Computer Science, lecture and exercises, University of Innsbruck
2012 – 2017	Operating Systems, lecture, University of Innsbruck
2012	Compiler-based Code Analysis, Transformation and Auto-Parallelisation, seminar, University of Innsbruck
2011	Programming, Analysis, and Optimisation for High-Performance Computing, exercises, University of Innsbruck
2010 – 2017	Bachelor Theses, seminar, University of Innsbruck
2010 – 2011	Peer-to-Peer Systems, lecture, University of Innsbruck
2010	Game Theory and Planning, seminar, University of Innsbruck
2007 – 2017	Compiler Construction, lecture and exercises, University of Innsbruck
2004 – 2017	Advanced Distributed and Parallel Systems, lecture and exercises, University of Innsbruck
2004 – 2017	Parallel Systems, exercises, University of Innsbruck
2004	Software Development: exercises, University of Innsbruck

Supervised Theses

PhD	5 graduated, 5 in progress
Bachelor and Master	27 graduated, 1 science award of the Wirtschaftskammer Tirol

Administration

2014 – 2017	Responsible for Computer Science study (Studienbeauftragter), University of Innsbruck
2009 – 2015	Coordinator of the Erasmus program, Institute of Computer Science, University of Innsbruck
2011	Member of the Search Committee: Computer Graphics, Institute of Computer Science, University of Innsbruck
2009 – 2010	Member of the Search Committee: Technical Computer Science, Institute of Computer Science, University of Innsbruck
2009 – 2015	Member of several Habilitation commissions, University of Innsbruck
2008	Member of the Search Committee: Service-Oriented Architectures, Institute of Computer Science, University of Innsbruck

Languages	Romanian (mother tongue)

English

Italian (fluent)

2001   German: Certificate 2001/33, 5.05, Level 5, Vienna University Courses

International Presentations (Selection)

2017	Multi-objective Modelling and Optimization of Scientific and Industrial Applications on Distributed Computing Infrastructures, *International Conference on Computing, Communication and Automation*, Greater Noida, India
2017	Multi-Objective Optimization of Scientific Applications, *HPDC Technical Program Committee Workshop*, Tampa, USA
2017	Use Cases Towards a Decentralized Repository for Transparent and Efficient Virtual Machine Operations, 25th *Euromicro International Conference on Parallel, Distributed and Network-based Processing*, Saint Petersburg, Russia
2016	Handling the Uncertainty in Resource Performance for Executing Workflow Applications in Clouds, 9th *IEEE/ACM International Conference on Utility and Cloud Computing*, Shanghai, China
2016	An Improved Model for Live Migration in Data Centre Simulators, 9th *IEEE/ACM International Conference on Utility and Cloud Computing*, Shanghai, China, **Best paper award**
2016	Cloud Computing: A Disruptive Technology?, *Technology, Entertainment, Design (TEDx)*, Kufstein, Austria
2016	An Improved Model for Live Migration in Data Centre Simulators, 16th *IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing*, Cartagena, Columbia
2016	A Scalable GPU-enabled Framework for Training Deep Neural Networks, 2nd *International Conference on Green High Performance Computing*, Nagercoil, India
2016	Successful Massively Multi-Player Online Games – A Cloud Perspective, 2nd *International Conference on Green High Performance Computing*, Nagercoil, India
2015	A Workflow Runtime Environment for Manycore Parallel Architectures, *Workflows in Support of Large-Scale Science*, Austin, USA
2015	Massively Multiplayer Online Gaming on Heterogeneous Distributed Computing Platforms, *Austrian Computer Science Day*, Vienna, Austria
2015	The ENTICE Project: Decentralized Repositories for Transparent and Efficient Virtual Machine Operations, 4th *Workshop on Management of Resources and Services in Cloud and Sky Vomputing*, Timisoara, Romania
2014	Multi-Objective Scheduling and Optimisation for Parallel and Distributed Systems, 1st *International Workshop of Sustainable Ultrascale Network*, Porto, Portugal
2014	Scientific Workflow Scheduling on Federated Clouds, *Euro-Par 2014 – Parallel Processing*, Porto, Portugal
2014	Comparison of Static and Dynamic Resource Allocation for MMOGs on Unreliable Resources, 2nd *Workshop on Large Scale Distributed Virtual Environments on Clouds*, Porto, Portugal
2014	Massively Multiplayer Online Gaming on Heterogeneous Parallel Platforms, 12th *International HeteroPar Workshop on Algorithms, Models and Tools for Parallel Computing on Heterogeneous Platforms*, Porto, Portugal
2014	Using Java for Programming Heterogeneous Manycore Parallel Computers, 3rd *International Conference, Theory and Practice in Modern Computing*, Lisbon, Portugal

2013	Budget Constrained Resource Provisioning for Scientific Applications in Cloud, *International Conference on Cloud Computing Technology and Science*, Bristol, UK
2013	Execution Time Prediction for Grid Infrastructures based on Runtime Provenance Data, 8th *Workshop On Workflows in Support of Large-Scale Science*, Denver, USA
2013	Autonomic Cloud-based Operation of Massively Multiplayer Online Games, *The ACM Cloud and Autonomic Computing Conference*, Miami, USA
2013	Autonomous Massively Multiplayer Online Game Operation on Unreliable Resources, 6th *International C* Conference on Computer Science & Software Engineering*, Porto, Portugal
2013	SLA-based Operation of Massively Multiplayer Online Games in Competition-based Environments, 6th *International C* Conference on Computer Science & Software Engineering*, Porto, Portugal
2012	RainCloud: The use of public cloud for weather forecasting for Tyrol public services, *Open Workshop Towards an EU Strategy of Cloud Computing for Government and Science*, Brussels, Belgium
2012	JavaSymphony Extensions for Parallel GPU Computing, 41st *International Conference on Parallel Processing*, Pittsburgh, USA
2012	A Multi-Objective Approach for Workflow Scheduling in Heterogeneous Environments, 7th *IEEE/ACM International Symposium on Cluster Computing and the Grid*, Ottawa, Canada
2012	Scientific Computing with Google App Engine, 2nd *International Workshop on Cloud Computing and Scientific Applications*, Ottawa, Canada
2011	IWIR: A Language Enabling Portability Across Grid Workflow Systems, 6th *Workshop on Workflows in Support of Large-Scale Science*, Seattle, USA
2011	Benchmarking and Provisioning of Cloud Computing Resources to Scientific Applications, *ISC Cloud*, Mannheim, Germany
2011	Semi-Automatic Composition of Ontologies for ASKALON Grid Workflows, *CoreGRID/ERCIM Workshop on Grids, Clouds and P2P Computing*, Bordeaux, France
2011	Scientific Computing in the Cloud, *International Conference on Simulation Technology*, Stuttgart, Germany
2010	Scheduling Scientific Workflows to Meet Soft Deadlines in the Absence of Failure Models, *Euro-Par 2010 – Parallel Processing*, Ischia, Italy
2010	GroudSim: An Event-based Simulation Framework for Computational Grids and Clouds, *CoreGRID/ERCIM Workshop on Grids, Clouds and P2P Computing*, Ischia, Italy
2010	Scientific Computing in the Austrian Grid with the ASKALON Environment, *Faculty of Computer Science, Free University of Bozen-Bolzano*, Italy
2009	A Performance Analysis of EC2 Cloud Computing Services for Scientific Computing, 1st *International Conference on Cloud Computing*, Munich, Germany
2009	A Monitoring Infrastructure for Real-Time Online Interactive Applications, 2nd *International Workshop on Real-Time Online Interactive Applications*, Delft, Netherlands
2009	A Hybrid Intelligent Approach for Performance Modeling and Prediction of Workflow Activities in Grids, 9th *International Symposium on Cluster Computing and the Grid*, Shanghai, China

2009	Business Models for Hosting and Operating Massively Multiplayer Online Games, *Economics of Cloud Computing: Enabling a Grid-wide Economy Workshop*, Athens, Greece
2009	Benchmarking Amazon EC2 Services for Scientific Computing, *CoreGRID Institute on Resource Management and Scheduling*, Pisa, Italy
2008	Enhancing Grids for Massively Multiplayer Online Computer Games, *Euro-Par*, Las Palmas, Gran Canaria, Spain
2008	Resource Availability Comparison and Prediction, *CoreGRID Symposium*, Las Palmas, Gran Canaria, Spain
2008	Grid workflows: Current Stage and Future Directions, 3rd *EchoGRID Workshop*, Invited presentation, Athens, Greece
2008	Resource Availability Characterization and Online Prediction in Large Scale Computational Grids, *CoreGRID Integration Workshop*, Hersonissos, Crete, Greece
2008	A Grid Environment for Real-Time Multiplayer Online Games, *CoreGRID Integration Workshop, Hersonissos*, Crete, Greece
2008	Grid Resource Management in Massively Multiplayer Online Games, 7th *CoreGRID WP6 meeting*, Dortmund, Germany
2007	Online Analysis and Runtime Steering of Dynamic Workflows in the ASKALON Grid Environment, 7th *International Conference on Cluster Computing the Grid*, Rio de Janeiro, Brazil
2007	Specification-correct and Scalable Coordination of Scientific Applications in Grid Environments, 7th *International Conference on Cluster Computing and the Grid*, Rio de Janeiro, Brazil
2007	Scheduling under ASKALON, *CoreGRID WP6 Workshop*, Manchester, UK
2007	Scheduling in the ASKALON Grid environment, *Open Grid Forum*, Resource Scheduling Architecture Research Group, Manchester, UK
2006	edutain@grid Project, *EU Concertation Meeting*, Amsterdam, Netherlands
2005	Optimising Parallel Applications on the Grid using Irregular Array Distributions, *European Grid Conference*, Amsterdam, Netherlands
2005	Dynamic Scheduling of Workflow Applications on the Grid: A Case Study, *Symposium on Applied Computing*, Santa Fe, USA
2004	Case Study: Workflow Applications for the Grid, *Austrian Grid User Workshop*, Linz, Austria
2003	From Web Services to OGSA: Experiences in Implementing an OGSA-based Grid Application, 4th *International Workshop of Grid Computing*, Phoenix, Arizona, USA
2003	A Web service-based Experiment Management System for the Grid, 17th *International Parallel and Distributed Processing Symposium*, **Best paper award**, Nice, France
2003	On Using ZENTURIO for Performance and Parameter Studies on Cluster and Grid Architectures, 11th *Euromicro Conference on Parallel Distributed and Network based Processing*, Genoa, Italy
2002	ZEN: A Directive-based Language for Automatic Experiment Management of Parallel and Distributed Programs, 31st *International Conference on Parallel Processing*, Vancouver, Canada
2001	FIRST: A Framework for Interoperable Software Tools, *Invited presentation*, Institute for Software Science, University of Vienna, Vienna, Austria

2000	A Distributed Object-Oriented Framework for Tool Development, 34th *International Conference on Technology of Object-Oriented Languages and Systems*, Santa Barbara, USA
1999	FIRST: A Framework for Interoperable Resources, Services, and Tools, *International Conference on Parallel and Distributed Processing Techniques and Applications*, Las Vegas, USA

Tutorials

09/2007	ASKALON: Grid Application Development and Computing Environment, 8th *IEEE / ACM International Conference on Grid Computing*, Austin, USA
09/2007	ASKALON: a programming and runtime environment for Grid applications, *Core-GRID Summer School*, Budapest, Hungary
11/2006	ASKALON programming environment and tool-set for Grid computing, 19th *IEEE / ACM International Conference for High Performance Computing, Storage, Networking and Analysis*, Tampa, USA
11/2005	ASKALON programming environment and tool-set for Grid computing, 18th *IEEE / ACM International Conference for High Performance Computing, Storage, Networking, and Analysis*, Seattle, USA

Publications

Books	Radu Prodan and Thomas Fahringer. *Grid Computing. Experiment Management, Tool Integration, and Scientific Workflows*, volume 4340 of *Lecture Notes in Computer Science*. Springer, February 2007.
Editorials	Florin Pop, Alexandru Iosup, and Radu Prodan. HPS-HDS: High performance scheduling for heterogeneous distributed systems. In *Future Generation Computer Systems*, volume 78, chapter 1, pages 242–244. Elsevier, January 2018.
	Radu Prodan, Florin Pop, and Ralf-Peter Mundani, editors. *2017 16th International Symposium on Parallel and Distributed Computing*. IEEE, July 2017.
	Laura Ricci, Alexandru Iosup, and Radu Prodan. Large scale distributed cooperative environments on clouds and P2P. In *Peer-to-Peer Networking and Applications*, volume 9, pages 1–2. Springer, April 2016.
	Florin Pop and Radu Prodan, editors. *Proceedings of the Third International Workshop on Adaptive Resource Management and Scheduling for Cloud Computing*. ACM, July 2016.
	Hai-Xiang Lin, Michael Alexander, Martti Forsell, Andreas Knüpfer, Radu Prodan, Leonel Sousa, and Achim Streit, editors. *Euro-Par 2009 Parallel Processing Workshops*, volume 6043 of *Lecture Notes in Computer Science*. Springer, 2010.
Book chapters	Simon Ostermann, Radu Prodan, Thomas Fahringer, Gabor Kecskemeti, Salman Taherizadah, and Vlado Stankovski. Decentralised repositories for transparent and efficient virtual machine operations: Architecture of the ENTICE project. In *Developing Interoperable and Federated Cloud Architectures*, page 50. IGI Global, 2016.
	Simon Ostermann, Matthias Janetschek, Radu Prodan, and Thomas Fahringer. *Cloud Services, Networking and Management*, chapter Scientific Applications on Clouds, pages 311–330. Number 13. Wiley, April 2015.
	Alexandru Iosup, Radu Prodan, and Dick Epema. *Cloud Computing for Data-Intensive Applications*, volume I, chapter IaaS Cloud Benchmarking: Approaches, Challenges, and Experience, pages 83–104. Springer, November 2014.

Radu Prodan. Specification and performance characteristics of scientific Grid workflows. In Venky Shankararaman, editor, *Business Enterprise, Process and Technology Management: Models for Optimization*, pages 212–238. IGI Global, 2012.

Vlad Nae, Radu Prodan, Alexandru Iosup, and Thomas Fahringer. Multiplayer online games hosting on Cloud resources. In Rajkumar Buyya, James Broberg, and Andrzej M. Goscinski, editors, *Cloud Computing: Principles and Paradigms*, chapter 19, pages 491–509. John Wiley & Sons, January 2011.

Simon Ostermann, Radu Prodan, and Thomas Fahringer. Resource management for hybrid Grid and Cloud computing. In Nick Antonopoulos and Lee Gillam, editors, *Cloud Computing: Principles, Systems and Applications*, volume 0 of *Computer Communications and Networks*, pages 179–194. Springer, 1 edition, August 2010.

Radu Prodan and Vlad Nae. edutain@grid: A resource management platform for massively multiplayer online games. In Agustin Soria and Juliàn Maldonado, editors, *Computer Games: Learning Objectives, Cognitive Performance and Effects on Development*, Computer Science, Technology and Applications. Nova Science Publishers, June 2010.

Radu Prodan, Farrukh Nadeem, and Thomas Fahringer. Benchmarking Grid applications for performance and scalability predictions. In Kuan-Ching Li, Ching-Hsien Hsu, Laurence T. Yang, Jack Dongarra, and Hans Zima, editors, *Handbook of Research on Scalable Computing Technologies*. IGI Global, 2010.

Radu Prodan and Rubing Duan. Cooperative game theory-based cost optimization for scientific workflows. In Rajkumar Buyya and Kris Bubendorfer, editors, *Market Oriented Grid and Utility Computing*, chapter 21, pages 475–494. John Wiley & Sons, November 2009.

Radu Prodan. Fault tolerance in Grid workflow enactment engines. In G. A. Gravvanis, J. P. Morrison, H. R. Arabnia, and D. Power, editors, *Grid Technology and Applications: Recent Developments*. Nova Science Publishers, April 2009.

Simon Ostermann, Kassian Plankensteiner, Radu Prodan, Thomas Fahringer, and Alexandru Iosup. Workflow monitoring and analysis tool for ASKALON. In Ramin Yahyapour, Domenico Talia, and Norbert Meyer, editors, *Grid and Services Evolution*, CoreGRID, pages 1–14. Springer, June 2009.

Kassian Plankensteiner, Radu Prodan, Thomas Fahringer, Attila Kertész, and Péter Kacsuk. Fault detection, prevention and recovery techniques in current Grid workflow systems. In *Grid and Services Evolution*, CoreGRID, pages 1–13. Springer, June 2009.

Simon Ostermann, Radu Prodan, Thomas Fahringer, Alexandru Iosup, and Dick Epema. A trace-based investigation of the characteristics of Grid workflows. In Thierry Priol and Marco Vanneschi, editors, *From Grids to Service and Pervasive Computing*, CoreGRID, pages 191–203. Springer, August 2008.

Farrukh Nadeem, Radu Prodan, Thomas Fahringer, and Alexandru Iosup. A framework for resource availability characterization and online prediction in Grids. In Sergei Gorlatch, Paraskevi Fragopoulou, and Thierry Priol, editors, *Grid Computing*, CoreGRID, pages 209–224. Springer, July 2008.

Radu Prodan, Vlad Nae, Thomas Fahringer, Sergei Gorlatch, Frank Glinka, Alexander Ploß, and Jens Müller-Iden. A Grid environment for real-time multiplayer online games. In Sergei Gorlatch, Paraskevi Fragopoulou, and Thierry Priol, editors, *Grid Computing. Achievements and Prospects*, CoreGRID, pages 225–236. Springer, July 2008.

Farrukh Nadeem, Radu Prodan, Thomas Fahringer, and Vincent Keller. An evaluation of availability comparison and prediction for optimized resource selection in

the Grid. In Thierry Priol and Marco Vanneschi, editors, *From Grids to Service and Pervasive Computing*, CoreGRID, pages 63–76. Springer, July 2008.

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