

1 Curriculum vitae Prof. Dr. René Schumann

Personal Data

Name Dr. René Schumann
Address (office) Institute of Information Systems
University of Applied Sciences Western Switzerland
(HES-SO Valais/Wallis)
Rue de Technopôle 3, 3960 Sierre, Switzerland
E-Mail rene.schumann@hevs.ch
Private address Napoleonstr. 28c , 3930 Visp, Switzerland

Education

2010 PhD (Dr. phil. nat.), Institute of Informatics, Johann Wolfgang Goethe University Frankfurt am Main, Germany
2004 Diploma (Master equivalent), Department of Computer Science, Carl von Ossietzky University Oldenburg, Germany
1998 University-entrance diploma (Abitur), Handelslehranstalten (BBS I) Delmenhorst, Germany

Job experience

since 2012 Professor for Business Informatics, University of Applied Sciences Western Switzerland (HES-SO), Sierre
2011 – 2012 Assistant post-doc, University of Applied Sciences Western Switzerland, (HES-SO), Sierre
2010 – 2011: German Academic Exchange Service (DAAD) Postdoctoral Fellow, National Institute of Informatics, Tokyo, Japan
2007 – 2010: Research Scientist, Chair for Information Systems and Simulation (Prof. Timm), Institute of Computer Science, Goethe University, Frankfurt a. M., Germany
2004 – 2007: Research Scientist, OFFIS Institute for Informatics e.V., R&D Division Business Information Management, Oldenburg, Germany

Grants/ Fellowships

Projects

- Hydro Power Operations: Hydro Power Operation and Economic Performance in a Changing Market Environment (2014 – 2018), Swiss National Science Foundation, National Research Program 70 "Energy Transition" (407040.153760)
- ANP: Air Navigation Platform – planification des vols écologiques, -économique et sûre grâce aux données météo temps réelles (2014 - 2015), CTI (16610.1 PFES-ES)
- Val2Pro: Validation and Valorization of administrative processes (2013-2014), RSCO-ISNet

Personal Grands

- Short Term Scientific Mission, COST Action TU-1102 (2012),
- German Academic Exchange Service Postdoc Fellowship, NII, Tokyo Japan (2010-2011),
- German Academic Exchange Service Short Term PhD Student Fellowship (2010)
- Short Term Scientific Mission, COST Action IC0801 (2009)

Professional Activities

Organized Events (since 2010)

- Chair Doctoral Consortium MATES 2012, Trier
- Chair, Joint Doctoral Consortium KI & MATES 2011, Berlin
- Co-Chair, Doctoral Mentoring Program, MATES 2010, Leipzig

Memberships in Association (alphabetic order)

- Association for Computing Machinery (ACM)
- German Informatics Society (GI e.V.)
- German Society for Operations Research (GOR e.V)
- Swiss Informatics Society (SI)

Board Membership

- Member of the working group *Smart Energy* Swiss Telecommunications Association, 2013 -
- Member of the Management Committee of the Cost Action TU1102 *Towards Autonomic Road Transport Support Systems*, 2011-2014 (Representing Switzerland)

Stays abroad & Visits of research groups

- Örebro University, STSM COST Action TU-1102, 24.10.-03.11.2012, Örebro (Sweden)
- National Institute of Informatics, Tokyo Japan, DAAD Fellowship, 11/2010 – 05/2011
- Kyushu University, Department of Intelligent Systems, Prof. Dr. Makoto Yokoo, 05/2011

- Kobe University, Graduate School of Maritime Science, Prof. Dr. Katsutoshi Hirayama, 05/2011
- University of Calgary, Calgary, Prof. Dr. Jörg Denzinger, 03/2011-04/2011
- EBTIC, Kustar University, Abu Dhabi (VAE), Dr. Christian Guttmann, 11/2010
- Universidad Rey Juan Carlos, Prof. Dr. S. Osowski – CETINA, DAAD Fellowship 02/2010-04/2010, Móstoles (Madrid)

Membership in Program Committees (selection)

Reviewing Board Member

- Reviewer for the German Academic Exchange Service (DAAD), since 2013
- IEEE Transactions on Systems, Man, and Cybernetics–Part B: Cybernetics, since 2012

Reviewing for Conferences, Workshops and Special Issues

- International Conference on Autonomous Agents & Multiagent Systems (AAMAS 2015), Istanbul
- 12. German Conference on Multiagent System Technologies (MATES 2014), Stuttgart
- 8th International Workshop on Agents in Traffic and Transportation (ATT 2014), co-located to AAMAS 2014 Paris
- AI Problems and Approaches for Intelligent Environments (AI@IE 2014) Workshop, co-located 21. European Conference on Artificial Intelligence (ECAI 2014), Prague
- 16th International IEEE Annual Conference on Intelligent Transportation Systems (IEEE-ITSC2013), Hague
- E-Gov Track, 47th Hawaii International Conference on System Sciences (HICSS), 2014
- Journal of Intelligent Transportation Systems: Technology, Planning, and Operations. Special Issue on Agents in Traffic and Transportation
- 11. German Conference on Multiagent System Technologies (MATES 2013), Koblenz
- 11. Internationale Conference on Wirtschaftsinformatik (WI2013), Leipzig, Germany
- 10th German Conference on Multiagent System Technologies (MATES 2012), Trier, Germany
- 35th Annual German Conference on Artificial Intelligence, KI2012, Saarbrücken, Germany
- 14th International Conference on Coordination Models and Languages (Coordination 2012), Stockholm, Sweden
- Assessing Agent Applications Special Session at 10th Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS 2012), Salamanca, 28th - 30th March 2012
- Coordination Models, Languages and Applications Special Track of the 27th ACM Symposium on Applied Computing (SAC'12) March 25 - 29, 2012

- 2011 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT-11), Lyon, France
- 34th Annual German Conference on Artificial Intelligence, KI2011, Berlin, Germany
- KI 2007, Osnabrück, Germany
- Special Issue IT in der Energiewirtschaft of the Journal Wirtschaftsinformatik, 2007

Invited Talks (Selection)

- *The APP COP project: Analyzing Problem Partitioning of Complex Optimization Problems*, Graduate School of Maritime Science, University of Kobe, Kobe, 11.05.2011
- *Analyzing Problem Partitioning of Complex Optimization Problems*, Department of Computer Science, University of Calgary, Calgary, 01.04.2011
- *Engineering Coordination: Operative and strategic decision problems*, EBTIC, Abu Dhabi (VAE), 01.11.2010
- *Online Planning: Challenges and Lessons Learned*, Session: Techniques for Online Planning in Vehicle Routing and Scheduling, 23rd European Conference on Operational Research (EURO 2009), Bonn, 05-08.07.09

Additionally Dr. Schumann has given more than 15 talks at conferences and workshops presenting his work.

Teaching Activities

Lectures:

- Lecture: *Business Intelligence*, since 2011, HES-SO VS
- Lecture: *Software Industrialisierung*, since 2012, HES-SO VS
- Lecture: *Automation of Business Processes*, since 2012, HES-SO VS
- Lecture: *Software Engineering*, since 2012, HES-SO VS
- Lecture: *PC-Handhabung*, since 2013, HES-SO VS
- Lecture: *Operations Research*, since 2014, HES-SO VS
- Practical Course *Wirtschaftsinformatik und Simulation*, 2009, Goethe University (Germany)
- Seminar *Aktuelle Themen aus der Wissensverarbeitung*, 2008 & 2009, Goethe University (Germany)
- Practical Course *Simulation autonomer Systeme*, 2008, Goethe University (Germany)
- Practical Course *Modellierung und Simulation*, 2007, Goethe University (Germany)
- Seminar: *Classical Planning*, 2007, (Oldenburg University, Germany)

In addition 14 Bachelor, Master and Diplom thesis have been supervised.