Keynotes

Streams, Semantics and the Real World

Manfred Hauswirth

Digital Enterprise Research Institute (DERI),
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Short Bio

Manfred Hauswirth is the Vice-Director of the Digital Enterprise Research Institute (DERI), Galway, Ireland and a professor at the National University of Ireland, Galway (NUIG).

His research current research focus is on linked data streams, semantic sensor networks, sensor networks middleware, large-scale semantics-enabled distributed information systems and applications. Manfred has also worked extensively in peer-to-peer systems, Internet of things, self-organization and self-management, service-oriented architectures and distributed systems security.

He has published over 160 papers in these domains, he has co-authored a book on distributed software architectures and several book chapters on data management and semantics.

Manfred is an associate editor of IEEE Transactions on Services Computing, has served in over 180 program committees of international scientific conferences and was program co-chair of the Seventh IEEE International Conference on Peer-to-Peer Computing (IEEE P2P) in 2007, general chair of the Fifth European Semantic Web Conference (ESWC) in 2008, program co-chair of the 12th International Conference on Web Information System Engineering (WISE) in 2011, and program co-chair of the 10th International Conference on Ontologies, DataBases, and Applications of Semantics (ODBASE) in 2011.

He is a member of IEEE and ACM and is on the board of WISEN, the Irish Wireless Sensors Enterprise Led Network, the scientific board of the Corporate Semantic Web research center at FU Berlin, and the Scientific Advisory Board of the Center for Sensor Web Technologies (CLARITY) in Dublin, Ireland.

Talk

"Streams, Semantics and the Real World"

Until recently the virtual world of information sources on the World Wide Web and activities in the real world have always been separated. However, knowledge accessible on the Web (the virtual world) may influence activities in the real

world and vice versa, but these influences are usually indirect and not immediate. We still lack general-purpose means to interconnect and link this information in a meaningful and simple way. Additionally, information comes in the form of streams which complicates the data management at all levels - from the Internet of Things (IoT) up to the backend information systems. The increasingly popular Linked Data paradigm provides a great model for data integration. However, supporting this approach from resource-constrained sensors on the IoT to (stream) databases and (stream) reasoning systems, possibly as hosted solutions in the cloud, opens up many genuine research problems that require well-orchestrated and synchronized research efforts in and across research communities. In this talk I will discuss these problems and possible solutions.

Empowering Process Participants – The Way to a Truly Agile Business Process Management

Herbert Kindermann

Metasonic AG, Germany

Short Bio

Since August 2009, Herbert Kindermann, has been the sole member of the Executive Board and CEO of Metasonic AG and responsible for all operative units, from marketing to software development. Kindermann focus on the company's customer orientation and the internationalization of sales and services around Metasonic® Suite. Before joining Metasonic in June 2007 as a member of the board of directors, Herbert held the position of a Member of the Executive Board at IDS Scheer with responsibility for all international business of the IDS Scheer AG. Previously, Herbert held various positions at COMSOFT GmbH (project manager, department manager and building up the SAP consulting business), IBCS S.A. (founder and CEO, building up business with subsidiaries in Germany, Czech Republic and Slovakia). In the beginning of the year 2000, IBCS became a member of the IDS Scheer group, taking over business responsibility for the region of Central and Eastern Europe. In 2003 Herbert Kindermann became a Member of the Extended Board of IDS Scheer AG.

Talk

"Empowering process participants - the way to a truly agile business process management"

Business process management (BPM) is widely adapted in large and mid-sized companies. While the focus is shifting more and more from the modelling of business processes for documentation reasons towards IT-backed business process support for the end-users there are still some open spots to consider to bring real business process management to the business departments of those companies. Herbert Kindermann will shed some light on current tool support for business process participants with respect to BPM, the actual needs of the business departments, the gap in between and how current technologies and trends, like a strong focus on KPIs, semantically enabled user interfaces, big data analytics, gamification and flexible workflow technology could lead to fundamental organizational changes and provide more enterprise agility in the future.

Long-Range Forecasting: Important Yet Almost Impossible

Hermann Maurer

TU Graz, Austria

Short Bio

Professor Dr. Hermann Maurer is Professor Emeritus at Graz University of Technology. He started his career at the University of Calgary as Assistant and Associate Professor, was appointed full professor at Karlsruhe just before he turned 30, and has been now Professor and Dean in Computer Science at Graz University of Technology since 1978, with some interruptions, like guest-professorships of more than a year at Denver University, University of Auckland, and shorter visits to Edith Cowan University in Perth, SMU in Dallas, Waterloo, Brasilia and others. Chair of the Informatics Section of Academia Europaea, "The Academy of Europe" since April 2009, and receiver of many national and international distinctions, Professor Maurer is author of over 650 papers and 20 books, founder of a number of companies, supervised some 60 Ph.D. and over 400 M.Sc. students and was leader of numerous multi-million Euro projects

Talk

"Long-range forecasting: important yet almost impossible"

In this talk I will first explain why we desperately need long range forecasts; then I present arguments (far beyond what comes to ones mind immediately) why such forecasts are in general impossible. Some of the arguments are also important for our own life and for society in general. I conclude this section, however, with one dramatic long range prediction. In the rest of the talk I discuss some important aspects of WWW, smart phones and e-Learning and conclude by showing why the main 5 theses of Spitzer's book "Digital dementia: how we ruin us and our children" are (fortunately) only partially correct, but why the impact of this book (in German, no translation exists so far) is potentially dangerous.

The Model-Driven (R)evolution

Richard Mark Soley

OMG

Short Bio

Dr. Richard Mark Soley is Chairman and Chief Executive Officer of OMG®.

As Chairman and CEO of OMG, Dr. Soley is responsible for the vision and direction of the world's largest consortium of its type. Dr. Soley joined the nascent OMG as Technical Director in 1989, leading the development of OMG's world-leading standardization process and the original CORBA® specification. In 1996, he led the effort to move into vertical market standards (starting with healthcare, finance, telecommunications and manufacturing) and modeling, leading first to the Unified Modeling Language TM (UML®) and later the Model Driven Architecture® (MDA®). He also led the effort to establish the SOA Consortium in January 2007, leading to the launch of the Business Ecology Initiative (BEI) in 2009. The Initiative focuses on the management imperative to make business more responsive, effective, sustainable and secure in a complex, networked world, through practice areas including Business Design, Business Process Excellence, Intelligent Business, Sustainable Business and Secure Business. In addition, Dr. Soley is the Executive Director of the Cloud Standards Customer Council, helping end-users transition to cloud computing and direct requirements and priorities for cloud standards throughout the industry.

Dr. Soley also serves on numerous industrial, technical and academic conference program committees, and speaks all over the world on issues relevant to standards, the adoption of new technology and creating successful companies. He is an active angel investor, and was involved in the creation of both the Eclipse Foundation and Open Health Tools. Previously, Dr. Soley was a cofounder and former Chairman/CEO of A.I. Architects, Inc., maker of the 386 HummingBoard and other PC and workstation hardware and software. Prior to that, he consulted for various technology companies and venture firms on matters pertaining to software investment opportunities. Dr. Soley has also consulted for IBM, Motorola, PictureTel, Texas Instruments, Gold Hill Computer and others. He began his professional life at Honeywell Computer Systems working on the Multics operating system.

A native of Baltimore, Maryland, U.S.A., Dr. Soley holds bachelor's, master's and doctoral degrees in Computer Science and Engineering from the Massachusetts Institute of Technology.

Talk

"The Model-Driven (R)evolution"
All sorts of promises of a revolution in software development accompany the phrase "model-driven" these days. Model Driven Architecture, Model Driven Development, Model Driven Enterprise – there must be something to these ideas, but is "model driven" the key to a revolution, or just the newest buzz word? Will we have to completely change the way we develop systems? Is code dead?

Richard Soley, Chairman of the Object Management Group (stewards of the Model Driven Architecture Initiative) will dispel some rumors about the model driven approach, and put it in the context of computing history. While there are some important implications for how complex systems are built, like most revolutions in software, Model Driven Architecture has straightforward underpinnings and represents a direct evolution from where we have been.

Overview of European Commission R&D Activities on Net Innovation

Ainhoa Uriarte

Short Bio

Ainhoa Uriarte is Project Officer in the unit "Net Innovation" of the Communications Networks, Content and Technology Directorate General in the European Commission. She has a degree in Industrial Engineering and a Postgraduate diploma in Business and Management. Previous to working for the Commission Mrs. Uriarte hold a position as research programme manager in the Spanish National Research Council (CSIC) and she has over eight years of experience working as a research project manager in several public and private institutions. She joined the European Commission in 2012 where she contributes to the implementation of the Net Innovation domain of the Information and Communication Technologies area of the 7th Framework Programme for research and technological development.

Talk

"Overview of European Commission R&D activities on Net Innovation"

The talk will give an overview of the research projects funded by the European Commission on Sensing Enterprises. Also future relevant activities under the next H2020 Framework Programme for Research and Innovation will be presented. The aim of the Future Internet challenge in the new programme is three fold; addressing the limitations of an Internet which was not designed to support the very large set of requirements imposed by an ever more diversified usage; supporting the advent of more efficient computational and data management models that respond to the challenges posed by increased device / object connectivity and data-intensive applications; and leveraging the Internet to foster innovative usages of social and economic value.