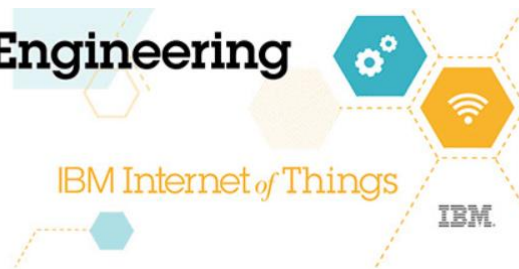


# ICE IoT - IBM Continuous Engineering for the Internet of Things

3-4 November, 2015  
Westfields Marriott Washington Dulles,  
Conference Center Dr, Chantilly, Virginia



SPEAKERS · ICE IoT 2015

## **Gavin Arthurs (IBM)**

Gavin is a Systems Solution Architect working in the IBM Rational Federal Business Unit. His practice focus is on model based development, including requirements development, systems engineering, and software development. Gavin currently works with many federal organizations (armed services, NASA etc) as well as with many of the federal system integrators such as Lockheed Martin, Boeing etc. He is a INCOSE Certified Systems Engineering Professional and is active in the professional community to promote the systems engineering practice.

## **Joanne Atlee (University of Waterloo)**

Joanne Atlee is a Professor in the David R. Cheriton School of Computer Science at the University of Waterloo. Her research interests include software modelling, automated analysis of software models, modular software development, feature interactions, and software-engineering education. She was Program Co-Chair for the 31st International Conference on Software Engineering (ICSE'09) and was Program Chair for the 13th IEEE Requirements Engineering Conference (RE'05). She served on the ACM SIGSOFT Executive Committee as an at-large member and is a member of the International Federation for Information Processing (IFIP) Working Group 2.9 on Software Requirements Engineering. She is a co-author with Shari Lawrence Pfleeger on their textbook "Software Engineering: Theory and Practice".

## **Robert Baillargeon (Method Park)**

Robert Baillargeon has spent the last two decades in the development of complex systems. Primarily focused in Automotive, he has worked at an Automotive OEM and Tier 1 Suppliers where he has led process, methods, and tooling organizations. His focus to improve organizational capabilities has delivered model driven engineering solutions, model based code generators for deeply embedded products, and application lifecycle management (ALM) solutions. He is currently a Principle Consultant for Method Park America where he works with industrial teams in organizational transformation, targeting industry processes and technology standards such as AUTOSAR, ISO 26262, CMMI, and Automotive SPICE.

## **John S. Baras (University of Maryland)**

John S. Baras holds a permanent joint appointment as professor in the department of electrical and computer engineering and the Institute for Systems Research. He was the founding director of ISR, which is one of the first six National Science Foundation engineering research centers. Dr. Baras is the Lockheed Martin Chair in Systems Engineering and is the founding and current director of the Center for Hybrid and Satellite Communication Networks, a NASA commercial space center. He also serves as a faculty member of the university's Interdisciplinary Program in Applied Mathematics and an affiliate professor in the Computer Science Department. Dr. Baras' research interests include scaleable multicast security; integrated management of hybrid communication networks; modeling and performance evaluation of large broadband hybrid networks; fast internet over heterogeneous (wireless-wireline) networks; manufacturing process selection for electromechanical products; intelligent control; wavelets; robust speaker identification; low complexity, high fidelity, low rate speech coding; image processing and understanding; learning clustering algorithms and

classification; distributed control (or decision) systems; stochastic dynamic model building; stochastic control and scheduling; real-time sequential detection and estimation; computer-aided control systems design; queuing systems; quantum communications; nonlinear systems; and radar systems modeling and performance evaluation and distributed parameter systems.

A Fellow of the IEEE, Dr. Baras has served the organization in various leadership positions. He also serves on the editorial boards of numerous mathematics and engineering journals and book series, and consults extensively with industry and government on various automation and telecommunication problems. He is the recipient of two Invention of the Year awards from the University of Maryland, holds two patents, and has received many awards for his research and publications. Dr. Baras received his B.S. in electrical engineering from the National Technical University of Athens, Greece, and the M.S. and Ph.D. degrees in Applied Math from Harvard University.

### **Graham Bleakley (IBM)**

Graham Bleakley Originally studied Mechanical Engineering, followed by a PhD in Model Based Systems Engineering and Process for Safety Critical Systems. Graham was acquired by IBM in 2008, but has worked for 15 years as a senior consultant for aero, defence and automotive companies helping them implement MBSE. He is currently a Solution Architect in IBMs, Unleash the Labs, where he helps develop integrated solutions based upon IBM products. His latest project involves solutions around the implementation of ASPICE for the automotive domain. His other responsibilities are as the Lead Architect and co-chair of the OMG UPDM group and an IBM representative for the IIC.

### **Barclay Brown (IBM)**

Barclay is the Global Solution Executive for Systems Engineering for IBM Rational. He has been a practitioner, consultant and speaker on systems engineering and software development methods for 25 years. For IBM, he has led client engagements in aerospace and defense, system development and IT enterprise architecture, helping clients transform their engineering organizations using IBM technologies, methods and tools. His current specialization includes model-based systems engineering, enterprise architecture, estimation methods and solution architecture.

### **Morgan Brown (IBM)**

Morgan works in a worldwide team, educating internal technical experts and business partners on new developments in the IBM Rational toolset. He is closely involved with the product development team, bringing a customer perspective to the discussions.

Coming from a background of telecoms and aerospace engineering, and with well over a decade of Requirements Management and Systems Engineering experience, Morgan is often found offering advice on tools and processes to customers, both large and small. From ongoing expert support to some large customers, to ad-hoc questions from colleagues, his daily routine is unpredictable, but the focus is always on improving the tools and usage of the tools

### **Henry Broodney (IBM)**

Henry is leading the main IBM research effort into development of new analytics and productivity tools for Systems Engineers, contributing to the feasibility of building the next generation complex cyber-physical systems, including various Internet of Things solutions. Henry is a member of the IBM Industry Academy and is also coordinating all Aerospace & Defense industry activity in IBM Research. He is an active member of INCOSE and a recognized speaker at leading Systems Engineering events.

Henry is an experienced Systems Engineer having dealt with wide range of disciplines in his professional career, ranging from architectural software development and electronic and chip design

through complex mechanical design and heavy metal machining. He is fluent in contemporary Systems Engineering methods and tools, having both used current and implemented new methodologies in the various environments he has worked at.

He holds M.B.A and a B.Sc.EE, both from Technion, Israeli Institute of Technology. He has started his professional career in the Israeli Air Force overseeing integrated avionics systems development. He later held a position of a team leader and a Systems Engineer at Rafael Systems, working on remotely controlled weapon stations and high power laser systems. In 2006 Henry co-founded and managed InGrid Networks, a software start-up in the field of IaaS cloud enablement and P2P computing. Before joining IBM Henry held a position of a Systems Engineer at Elbit Land Systems artillery directorate, where he helped introduce novice Systems Engineering methods for complex defense systems.

### **Thomas Capelle (Sodius)**

Tom is the President at Sodius. He has over 15 years experience in code generation and model transformation technologies, with a special focus on embedded software. Over the last 10 years, he has overseen the development of the Rhapsody in Ada code generator, the XMI toolkits for Rhapsody, Statemate, and Tau, custom IDE's for systems engineering, interoperability solutions for defense modeling, and a variety of other software solutions

### **Pawel Z. Chadzynski (Aras)**

Pawel Chadzynski is a Sr. Director, Product Management, at Aras Corp. focusing on integration of ALM and E-CAD design data and processes with Aras PLM platform. Pawel's background includes development of PLM integration solutions, visualization tools for electronic designs, CAD design collaboration platforms (patent holder), signal integrity analysis tools, PCB routing algorithms, and open industry standards (STEP EDMD - IDX, OSLC). Prior to Aras, Pawel held key technology leadership and management positions at PTC, Cadence and several other providers of CAD technologies for electronic design - including high-tech software technology startups. Pawel holds Bachelor of Science degree in Electrical Engineering and Computer Science and a Master degree in Technology Management from Polytechnic Institute of Brooklyn, New York

### **Stephanie Sharo Chiesi (Raytheon)**

Ms. Chiesi earned a B.S. in Aeronautics and Astronautics, a B.S. in Biology, and an M.S. in Aeronautics and Astronautics at the Massachusetts Institute of Technology. During that time, she worked at NASA's Jet Propulsion Laboratory, where she first developed her interest in complex systems engineering. Ms. Chiesi worked as a systems engineer at the Charles Stark Draper Laboratory in Cambridge, MA following her graduate education. There she worked on a Mars Scout risk reduction and participated as a systems engineer on research development programs for NASA's Concept Exploration Vehicle (CEV). Following her work at Draper Laboratory, Ms. Chiesi accepted a position at Paragon Space Development Corporation, where she worked as a space systems engineer, IPT Lead and deputy program manager supporting Paragon's role with the Environmental Control and Life Support System (ECLSS) for NASA's Orion program. Ms. Chiesi also served as the Program Manager for Paragon's Modular Air Revitalization System (MARS) which adapted the ARS Paragon designed for manned spaceflight to a system that can be implemented in ground based, closed loop applications. Ms. Chiesi joined Raytheon Missile Systems (RMS) in May of 2014 as a principal systems engineer and continues to apply and grow her expertise in Model Based Systems Engineering (MBSE). In addition to her assignments at her places of employment, Ms. Chiesi is also an active member of the International Council on Systems Engineering (INCOSE), working on the MBSE and Lean SE working groups and serving as chapter president for the Southern AZ chapter

2013-2015. She achieved the Certified Systems Engineering Professional (CSEP) certification through INCOSE in April of 2014.

### **Bill Chown (Mentor Graphics)**

Bill Chown, is product marketing director for the system-level engineering division at Mentor Graphics. His design career went from developing mixed signal and DSP systems at chip and board level in the UK, managing projects through to layout and production test, before moving to the semiconductor industry with Intersil. He has subsequently worked in EDA and test software development in Europe and the US with Mentor Graphics, Summit Design/TSSI, Integrated Measurement Systems and Credence. A twenty-nine year industry veteran, Bill currently specializes in system-level design and analysis across technology disciplines. Additionally, Bill has been involved with standards activities for several years, serving in the CFI, ECSI, and STIL initiatives, is past chair of the TTTC TAC on Virtual Test, served as a board member for The SPIRIT Consortium and is a board member for OMG. He is a Senior Member of the IEEE, and holds an Electronic Engineering degree from the University of Wales and an MBA from the University of Oregon.

### **Michael Crow (Boeing)**

Michael Crow is a Boeing Associate Technical Fellow in Systems Engineering and a member of the Integrated Product Architecture Team, which is responsible for deploying Model Based Systems Engineering to the Boeing Enterprise. Michael's specific responsibility is the deployment of SysML, IBM Rhapsody and IBM Design Manager. He is responsible for defining the associated Systems Engineering Process implementation and Training, and providing mentoring, coaching and consulting assistance to programs. Michael has been involved in UML/SysML training and consulting to Boeing programs since 1999, and has had extensive engagements on Connexion™ by Boeing, Air Traffic Management, Joint Strike Fighter, Airborne Early Warning and Control, Future Combat Systems, P8A (Anti-Submarine Aircraft) and EPX (Advanced Surveillance Platform). Michael joined the Boeing Company in 1983 and was previously the lead for mission analysis simulation development.

### **Dr. Bruce Powel Douglass (IBM)**

Embedded Software Methodologist. Ironman triathlete. Systems engineer. Ultramarathon cyclist. Contributor to UML and SysML specifications. Writer. Black Belt. Neuroscientist. Classical guitarist. Bruce Powel Douglass, who has a doctorate in neurocybernetics from the USD Medical School, has over 35 years of experience developing safety-critical real-time system in a variety of hard real-time environments. He is the author of over 6000 book pages from a number of technical books including *Agile Systems Engineering*, *Real-Time UML*, *Real-Time UML Workshop for Embedded Systems*, *Real-Time Design Patterns*, *Doing Hard Time*, *Real-Time Agility*, and *Design Patterns for Embedded Systems in C*. He is the Chief Evangelist at IBM Internet of Things (IoT), where he is a thought leader in the systems space. He can be followed on Twitter @IronmanBruce.

### **Justin Dyer (IBM)**

Justin Dyer is a Systems Solutions Architect in the IoT Continuous Engineering division of IBM. Since joining IBM (formerly Telelogic and I-Logix) in 1999, he has provided process and tool consulting and training to customers in a number of industries. Specializing in system engineering and embedded software development, Mr. Dyer's most recent focus has been in the area of helping customers build intelligent, connected devices. He is intimately familiar with the IBM Continuous Engineering solution including the use of DOORS Next Generation, Team Concert, Rhapsody, Quality Manager, Publishing Engine and Engineering Lifecycle Manager.

### **Eran Gery (IBM)**



Eran Gery is an IBM Distinguished Engineer and a lead architect for the IBM Continuous Engineering Solution. Eran has over 20 years of experience within the complex embedded systems domain. Eran's current focus is the key transformational aspects of continuous engineering: model based development & simulation, product line engineering, and integration of the systems engineering process into the enterprise, including operations and data analytics. In addition Eran also engages with key worldwide customers in the major vertical markets: Aerospace and Defense, Automotive, and Electronics.

Prior to this Eran was the development manager and the principal architect of the Rhapsody product at IBM Rational Software, a market leading model driven engineering solution. Eran was also part of the original UML and SysML specification teams in the OMG.

Eran's main areas of interest are Systems Engineering, Model Driven Development, Engineering Lifecycle Management, and the Industrial Internet (IoT). He holds an MSc and BSc degrees in computer science from the Technion, Israel Institute of Technology.

### **Jeff Gray (CerTech)**

Jeff Gray, CEO, CerTech LLC. Company Info: CertTech is a leading supplier of product, service and systems solutions for aerospace, automotive and medical companies under the auspices of RTCA DO-178B/C, ISO 26262 and IEC 62304, respectively. CertTech is a member of the IBM Business Partner program and the National Instruments Alliance Partner network, and collaborates with major software tool suppliers including IBM, National Instruments, Danlaw and BullseyeCoverage to offer cost effective tool qualification solutions for use in highly regulated industries.

### **Christopher Guerin (IBM)**

Christopher Guerin is an offering manager on the IBM Watson Strategic Partnerships team and is responsible for the development of first-of-a-kind Watson solutions within both the engineering and oil and gas domains. Watson is one of IBM's most significant innovations and represents a new era of information technology. For the first time, Watson makes the unstructured data that accounts for 80% of all data generated today accessible to a computer system. The resulting solutions IBM and its partners develop will transform industries by enhancing, scaling, and accelerating our individual capabilities.

Prior to joining the Watson team, Chris spent ten years developing data-driven solutions for electric utilities around the world. Most recently, Chris led a global team of sales consultants for Siemens' Smart Grid Applications business that worked with customers, partners, and systems integrators to advance innovative smart grid solutions.

Chris graduated from Columbia University in 2004 with a B.A degree. Today he lives in Austin, Texas.

### **Adam Hammett (HTii)**

Adam Hammett is an ABET accredited Systems Engineer. Adam has over 6 years of experience supporting Department of Defense research, engineering, and acquisition. He holds a Master's of Science in Systems Engineering from Johns Hopkins University as well as a Bachelor of Science degree in Physics from St. Mary's College of Maryland. Adam is a DoDAF certified enterprise architect as well as a certified IBM Rational deployment specialist. In his career, Adam has support numerous different competencies and programs within NAVAIR by providing research, analysis, database management, configuration management, requirements management, architecture development, as well as engineering support. Adam has a high level of experience with engineering tools including DOORS, DOORS Next Generation, Rational Team Concert, Rational Quality

Manager, Rational Publishing Engine, System Architect, Microsoft Visio, Microsoft Project, and CORE.

### **Daniel Hoffman**

Daniel Hoffman is the first Chief Innovation Officer for Montgomery County, Maryland, a position he has held since October 2012. He is responsible for creating and maintaining strategies and programs that generate innovative ideas in Montgomery County. The program he oversees serves as a laboratory for civic improvement and a safe place to test out new processes, technologies and ideas. He manages projects on a broad range of topics, from the Internet of Things (IoT) to autism technology to food security and more. Prior to his time at Montgomery County he was an appointee at the Nuclear Regulatory Commission and a consultant with PricewaterhouseCoopers. He Chairs the Montgomery County Food Council and serves on the Board of Leadership Montgomery. He is a recognized expert on open data, civic engagement, and IoT policy. He holds degrees from The George Washington University and Johns Hopkins University.

### **Ronald Houde (CMC Electronics)**

Ronald Houde is a Senior Systems Engineer/Analyst with Mannarino Systems & Software in St-Laurent, Québec and a member of the International Council on Systems Engineering (INCOSE). He has over 30 years of experience in government and commercial safety- and mission-critical software and systems engineering. Employers and customers have included world leaders such as Esterline/CMC Electronics, Lockheed Martin, Bombardier Aerospace, CAE, BPR Énergie, Hydro-Québec, the Canadian Department of National Defence and the U.S. Army. His main areas of employment have been in the design, development, integration and installation of mission- and safety-critical software systems and programmable electronic devices. His clients in both industry and government benefit from his skills in training and mentoring, complex problem analysis and solving, and communication. He has also been involved in technical training and university and continuing education programs since the early 1990s. He is experienced in the conduct, management and continuous process improvement of software and systems engineering activities covering the entire life-cycle of operational, mission support and safety-critical software systems. He is an experienced instructor to technical military and civilian audiences, having developed and taught numerous Avionics, Avionics Databus and Requirements Engineering workshops.

### **Alex Ivanov (Raytheon)**

**Alex Ivanov**, Principle Systems Engineer at Raytheon Space and Airborne Systems, is a passionate thought leader on how to standardize requirements management by providing a consistent architecture and process to anyone using IBM Rational DOORS. Alex is the technical lead for Raytheon's custom DXL library which brings together developers from across the enterprise with a common goal of reusing a common framework for requirements management leading to proven system engineering execution. With 10+ years' experience in managing a large scale distributed requirements database in the aerospace and defense industry, Alex believes everyone can benefit from using IBM Rational DOORS in a consistent and proven manner and is out to mentor and educate the masses one program at a time. Alex is an IBM Certified Deployment Professional DOORS v9, RDNG v5, CLM v4, RQM v3 and is a 5-time IBM Rational Champion (2011, 2012, 2013, 2014, 2015). Alex is very active on Raytheon's social media channels using IBM Connections, Microsoft Sharepoint and other tools such as online video channels to bring engineers together and excite the workforce. Alex has overcome his fear of public speaking and relishes the opportunity to inspire those around him. To connect with Alex Ivanov please visit his [LinkedIn profile](#).

### **William M. Jones (IBM)**

With 20 years of experience at IBM, Bill is a subject matter expert in Continuous Engineering, Systems and Software Engineering, Rational Engineering Lifecycle Manager, PLM-CLM integration, OSLC Integration, Internet of Things, Reporting and Data Warehousing. Bill is a regular speaker at IBM Interconnect and Inner Circle as well as the predecessors Innovate and Voice of the Customer.

### **Andreas Keis (Airbus)**

Andreas is heading Systems Engineering Process and Platform research within Airbus Group. His main challenge is to develop disruptive techniques and improve product development and collaboration despite the geographical distribution of Airbus' workforce and the fragmentation of the engineering data. Andreas is an expert in engineering data interoperability and consistency. He's an active supporter of the OSLC standard since its early days and is a board member of the OSLC steering committee in order to promote lightweight and flexible lifecycle integration.

Another topic Andreas is working on, is how to connect the virtual product development (model-based engineering) with the physical world (e.g. manufacturing, operations) to drastically decrease lead time, while able to deliver new product features. Andreas holds a Master in computer science from University of Applied Sciences Augsburg and a Master in software engineering from University Ulm.

### **Harry Koehnemann (321Gang)**

Harry Koehnemann is currently Director of Technology at 321 Gang., an IBM Rational Premier Business Partner, where he continues his passion for helping organizations be successful in large complex systems development. He has helped countless Fortune 500 companies in A&D, automotive, electronics, medical, and financial industries with their engineering and software lifecycle practices.

### **Jim Kolhoff (General Motors)**

Jim Kolhoff is the global director of software engineering for GM Powertrain. His organization is responsible for the design, development, and validation of software for engine and transmission controllers for GM globally. Jim's previous assignments at GM Powertrain include chief engineer of hybrid drive units and director of transmission controls. He has more than 30 years of experience in automotive powertrain engineering, including 25 years of embedded control system design. Jim has a Bachelor of Science in Electrical Engineering from General Motors Institute and a Master of Science in Electrical Engineering from California Institute of Technology.

### **Gregory T. Knowles (IBM)**

Greg is the Program Director for Analytics Offerings and Strategy within IBM's Internet of Things business unit. Greg works closely with customers to understand industry patterns and use cases, helping them leverage asset data and analytics to gain insights and drive bottom line business value. He has helped deliver solutions for a variety of industries including oil & gas, energy & utilities, healthcare, automotive, heavy equipment, transportation, and retail. Greg has been with IBM for 22 years and has served in various roles from product management, solution delivery and technical sales to architecture and development.

### **Charles Krueger (BigLever)**

Dr. Charles Krueger, PhD, CEO, BigLever Software. Dr. Krueger is a thought leader in the product line engineering (PLE) field with 25 years of experience in software engineering practice and more

than 60 articles, columns, book chapters, conference keynotes, and session presentations. Dr. Krueger has proven expertise in leading commercial product line adoption teams, and helping companies establish some of the industry's most notable PLE practices across a spectrum of industries including automotive, aerospace and defense, aviation systems, alternative energy, e-commerce, and computer systems. He received his PhD in computer science from Carnegie Mellon University.

### **Jonas Larsson (Saab)**

Jonas Larsson is a Systems Engineer at Saab Electronic Defence Systems with 15 years of experience in various Systems Engineering disciplines. For the last four years he has been working with the implementation of systems engineering processes, methods and tools including deployment of Model Based Systems Engineering within a large development project. Currently he is involved in product maintenance and development in the late life cycle stages production, maintenance and operations. Previous assignments at Saab has been as a manager for developing production test equipment, team leader radar warning sub system and Systems Engineer radar warning systems. Before joining Saab, Jonas worked as a Systems Engineer, Systems Engineer leader and team leader at Nokia Networks.

### **Dr. Juan Llorens (Prof - University of Madrid/The REUSE Company)**

Dr. Juan Llorens is Professor at the Carlos III University of Madrid (Spain) as well as CTO of The REUSE Company (TRC). He received his Industrial Engineer MS degree in 1986, and his PhD in Industrial Engineering and robotics in 1996. From 1998 to 2008 he split his educational activities between Madrid's University and the Högskolan på Åland (HÅ) (Finland), where he taught different Software Engineering subjects.

Dr. Llorens is the leader of the KR Group (Knowledge Reuse Group) formed by University members and TRC's development team. His responsibility is to perform all the R+D activities for TRC, all of them around Systems Reuse, traceability and quality management. Dr. Llorens is member of INCOSE since 2010, assuming the role of Vice-President of the Spanish Chapter, as well as technical director.

### **David Long (INCOSE)**

For over twenty years, David Long has focused on enabling, applying, and advancing model-based systems engineering (MBSE) to help transform the state of the systems engineering practice. David is the founder and president of Vitech Corporation where he developed CORE®, a leading systems engineering software environment. He co-authored the book A Primer for Model-Based Systems Engineering and is a frequent presenter at industry events around the world. A committed member of the systems community, David is president of the International Council on Systems Engineering (INCOSE), a 10,000 member professional organization focused on sharing, promoting, and advancing the best of systems engineering.

### **Doug Macdonald (Aras)**

Doug is Product Marketing Director at Aras, the next leader in enterprise Product Lifecycle Management (PLM) software. Macdonald has over 25 years' experience helping manufacturing companies streamline their processes for bringing new products to market, including senior marketing and business development positions at IBM, SAP, PTC, Aspect Development, and Sherpa Corporation. Macdonald began his career as a software developer with ComputerVision, followed by positions at Ford Motor Company and Coopers & Lybrand. He holds a BSc in Mechanical Engineering from Heriot-Watt University, Edinburgh.



### **Bonnie G. Mason (Philips HealthTech)**

Bonnie is a software tools engineer with more than 25 years of experience in the software and systems field. She is certified as an IBM Certified Deployment Professional DOORS v9, and as a Certified Software Quality Engineer, Certified Manager of Quality/Operational Excellence, and Certified Quality Auditor by the American Society for Quality. She earned a Bachelor of Science degree in Mechanical Engineering from the Massachusetts Institute of Technology, and a Master in Business Administration degree from Harvard University.

### **Daniel Moul (IBM)**

Senior Member of the Rational product management team in the Requirements area. Current role is Offering/Market Manager, focusing on the intersection of business and technical strategy. Formerly product line manager for the Rational enterprise modernization tools focusing on knowledge re-acquisition for application transformation. Prior roles include senior project manager for a development project that crossed three continents, development program manager, customer support manager, and (prior to joining IBM) the general manager of South Seas Computing (Fiji) Limited in the Fiji Islands.

### **Pierluigi Nuzzo (U.C. Berkeley)**

Pierluigi Nuzzo is a Postdoctoral Scholar at the Department of Electrical Engineering and Computer Sciences of the University of California, Berkeley. He received the Ph.D. in Electrical Engineering and Computer Sciences from the University of California at Berkeley in 2015. He also holds the Laurea (M.Sc.) degree in Electrical Engineering (summa cum laude) from the University of Pisa, Italy, and the Diploma in Engineering (summa cum laude) from the Sant'Anna School of Advanced Studies, Pisa.

Before joining U.C. Berkeley, he was a Researcher at IMEC, Leuven, Belgium, and the University of Pisa, working on the design of energy-efficient A/D converters, frequency synthesizers for reconfigurable radio, and design methodologies for mixed-signal integrated circuits. His research interests include: methodologies and tools for cyber-physical system and mixed-signal system design; contracts, interfaces and compositional methods for embedded system design; energy-efficient analog and mixed-signal circuit design.

Pierluigi received First Place in the operational category and Best Overall Submission in the 2006 DAC/ISSCC Design Competition, a Marie Curie Fellowship from the European Union in 2006, the U.C. Berkeley EECS departmental fellowship in 2008, the U.C. Berkeley Outstanding Graduate Student Instructor Award in 2013, and the IBM Ph.D. Fellowship in 2012 and 2014.

### **Eldad Palachi (IBM)**

Eldad Palachi joined the Rhapsody development team in 1999. He is leading the development of the Internet of Things Workbench service, which he initiated based on his experience developing model-based systems engineering capabilities as the Rhapsody architect. Eldad is also chairing the Model-Based Systems Engineering (MBSE) Roadmap Workgroup defining the next generation of SysML at the OMG and is representing IBM other systems engineering groups. His main expertise are software and complex systems modeling, simulation of discrete and cyber physical systems, code generation and embedded software development. Eldad holds a M.Sc. in Chemical Physics and a B.Sc. in Physics, both from Tel-Aviv Univ.

### **Jared Pulham (IBM)**

Jared Pulham is a senior product manager for IBM systems middleware and focuses specifically on analytics, reporting and document generation services and technologies. He has 15 years experience in software testing and development with a background and experience in many industries during five

years in services and professional services consultancy. His primary responsibilities for IBM are divided between oversight of Jazz Reporting Service, Rational Insight, Jazz Reporting Service and the Rational Lifecycle Integration Adaptors. Jared holds degrees from Brigham Young University and based with IBM in the United Kingdom.

#### **Dr. Sokwoo Rhee (National Institute of Standards and Technology)**

Dr. Sokwoo Rhee is Associate Director of Cyber-Physical Systems Program at the National Institute of Standards and Technology (NIST). He is currently leading the Global City Teams Challenge (GCTC) which aims to create a replicable and scalable model for collaborative incubation and deployment of Internet of Things (IoT) and Cyber-Physical Systems (CPS) solutions to improve the quality of life in smart cities around the world. He previously served as a Presidential Innovation Fellow on CPS, a program by the White House Office of Science and Technology Policy. During his fellowship, he co-led the SmartAmerica Challenge, which brought together IoT technologies and CPS across the nation to demonstrate how they can provide concrete examples of the socio-economic benefits. Prior to joining US government, he was Co-founder and CTO of Millennial Net, Inc., which was one of the first to successfully commercialize low-power wireless mesh/sensor network and Internet of Things technology from academia. His work and achievements have been recognized through awards including MIT Technology Review's Top Innovators under 35 and Red Herring's Top 5 Innovators. He holds more than a dozen US and International patents and numerous publications on wireless networks, biomedical sensors and embedded systems. He received his M.S. and Ph.D. in Mechanical Engineering from Massachusetts Institute of Technology.

#### **Jean-Claude Roussel (Airbus)**

Jean-Claude Roussel is a Systems Engineering Senior Expert at Airbus Group Innovations (Toulouse, France) with 34 years of experience in different Aerospace Programs. He is a member of the Systems Engineering Steering Committee of Airbus Group.

Jean-Claude has been successively responsible for Configuration Management, Project Management and Systems Engineering for aircraft developments in Airbus (A320, A330/A340, A400M, A380 and A350) and some space programs in Airbus Defense and Space (Satellite Ground Control Segment Immarsat, Telecom2 and Hermes Space Vehicle).

He has been a member of INCOSE since 2001 where he took an active role in the Requirements Working Group, extending it to European members. He was President of AFIS (Association Française d'Ingénierie Systeme) in 2007 & 2008, the French INCOSE Chapter, and then was the Technical Director of INCOSE in 2011 & 2012. He is now Director of the sector EMEA (Europe, Middle East, Africa) of INCOSE since Jan 2014 and is certified ESEP (Expert Systems Engineering Professional) from INCOSE.

#### **Frank Salvatore (Engility Corporation)**

Frank is married and has 2 sons ages 26 and 23. He lives in New Jersey. Frank received his Bachelor of Science in Electrical Engineering from the New Jersey Institute of Technology and his Master of science in Computer Science from American University. Frank has 27 years of Systems Engineering experience. He is a Principal Systems Engineer for Engility Corporation and is a leading member of their Systems Engineering Community of Practice. For the past 15 years Frank has provided support to the army and the Office Under the Secretary of Defense in Systems Engineering with in defining and applying systems engineering policy, guidance, processes, tools, training, and methods. Frank has 12 years of experience in supporting the development of Smart Munitions, the GPS navigation payload program, and Software Programmable Radio. Frank is a Certified Systems

Engineering Professional (CSEP) as well as an OMG Certified Systems Modeling Professional (OCSMP).

### **Fariz Saracevic (IBM)**

Fariz Saracevic is a member of IBM Product Management and Design team, responsible for IBM Internet of Things Continuous Engineering cloud strategy. He is working closely with other IBM leads to define and implement IBM cloud vision. Prior to this role, Fariz was responsible for IBM Rational Cloud strategy, IBM Rational solution for Agile ALM (<https://jazz.net/agile/>), JazzHub (<https://hub.jazz.net/>) scenario design, IBM Rational solution for Collaborative Lifecycle Management (CLM) and he was part of Automated Software Quality Product Management team responsible for automated functional solutions. Fariz co-authored "Software Test Engineering with IBM Rational Functional Tester: The Definitive Resource" book and he is writer and co-writer of several articles. He is Agile evangelist and founder of the Bosnia Agile (<http://agile.ba/en/>) and Agile Middle East (<http://meagile.com/>) associations. Fariz has worked for IBM Rational since 2004. He is a speaker at a wide variety of world-wide conferences on the Agile topic. He holds a Master in Information Technology degree from Virginia Tech and Bachelor of Science degree from George Mason University. Fariz can be reached at [fariz@us.ibm.com](mailto:fariz@us.ibm.com).

### **Holger Schmiedefeldt (Pure Systems)**

Holger Schmiedefeldt is VP Sales and member of the management team at pure-systems GmbH since 2008. pure-systems is a leading provider of tools and solutions for Variant Management and Product Line Engineering.

Holger's responsibilities include management of Strategic Key Customer relationships and building a network of value-add partners to extend pure-systems presence, sales and market reach.

Holger has more than 20 years of customer-centered sales and solutions-oriented consultancy experience working in the enterprise software ALM space. Prior to pure-systems Holger was Director Business Development at MKS. MKS was acquired by PTC in 2011. Prior to that Holger held positions at MKS as Managing Director for the UK Operations and the German subsidiary which he co-founded in 1994.

### **Dr. Mark Sherman (Software Engineering Institute)**

Dr. Mark Sherman is the Technical Director of the Cyber Security Foundations group at CERT within CMU's Software Engineering Institute. His team focuses on foundational research on the life cycle for building secure software and on data-driven analysis of cyber security. Before coming to CERT, Dr. Sherman was at IBM and various startups, working on a mobile systems, integrated hardware-software appliances, transaction processing, languages and compilers, virtualization, network protocols and databases. He has published over 50 papers on various topics in computer science.

### **Paul Strachan**

Paul has been involved in Requirements Management since 1997, starting off as a Support Engineer for Rational DOORS, progressing through to Level 3 Support and then Manager of the Rational DOORS Level 3 Support team. After a time spent as Development Manager for Rational DOORS, I went back to managing the Rational DOORS Level 3 team and now am the Rational DOORS Next Generation Level 3 Manager as well as the Release Manager for the Collaborative Lifecycle Management Maintenance Releases. I have presented a number of papers at conferences for Rational DOORS and Rational DOORS Next Generation.

### **Hubertus Tummescheit, PhD (Modelon Inc.)**

Dr. Tummuscheit is the Chief Executive Officer of Modelon Inc., and one of the founders of Modelon AB. He received his MSc in Mechanical Engineering from the Technical University of Hamburg-Harburg, Germany in 1996, and his PhD in Automatic Control from the University of Lund, Sweden in 2002.

He has been involved in the Design of the Modelica language from the beginning and is the developer of a number of open source and commercial Modelica Libraries in the energy and HVAC domains. In 2003 he worked as a research scientist at United Technologies Research Center and returned to Sweden in 2004 to start Modelon AB, the first company fully dedicated to tools and services based on Modelica and FMI. Dr. Tummuscheit has served as the CEO of Modelon AB from 2004 to 2012 and moved to Hartford, Connecticut in 2013 to establish Modelon as a leading player in system simulation in the United States.

**Michael Valenta**

Michael Valenta is the component architect of Jazz/RTC Source Control component. He joined the team in 2007 and has worked on many different SCM features including distributed SCM, improved merge handling for gaps, and many others. Prior to joining the SCM team, he was one of the original committers on the Eclipse project, working on the Team and CVS support and the Eclipse Platform UI.

### **Lonnie VanZandt (Sodius)**

Lonnie VanZandt is an Enterprise Architect at Sodius where he specializes in business development for Sodius' products and services and where he designs, implements, and uses modern collaboration and modeling tools. Lonnie earned Masters of Science and Bachelors of Science degrees in Computer Engineering at the University of Illinois. For eleven years afterwards, he was a Member of Technical Staff at AT&T Bell Labs where he worked as a Unix and Linux Operating Systems Kernel Engineer on communications systems. He has worked with a variety of vendors of operating systems and of modeling software including roles as a schedulability engineer for TimeSys Linux and as Chief Architect for No Magic. Currently, he is an Enterprise Architect and Business Development agent at Sodius. He has contributed to the Object Management Group standards for UML, MARTE, SysML, BPMN, UPDM, and FIBO. He is a participant in INCOSE and in OASIS standards. He is Sodius' representative to the North American AUTOSAR Users Group.

### **Christian Wachtendorf (BTC)**

Christian Wachtendorf studied Computer Science at the University of Oldenburg and finished his Diploma in 2002. Afterwards he worked as a software engineer for the company BTC - Embedded Systems AG. Since 2012 he is working in the position of a project leader at BTC - Embedded Systems AG. In this role he is responsible for the development of UML based testing tools.

### **Ian Zimmermann (ALS Solutions)**

Former Aerospace Engineer with the Canadian Military. Started working as a customer with DOORS in 1996. Joined QSS in 2000 as a Senior Consultant which became Telelogic. Was the Director of Requirements and Project Portfolio Management for North America when IBM acquired Telelogic in 2008. Was one of the world wide experts for DOORS till departing IBM in 2010. Currently the Director of IZTech, an IBM Business Partner continuing to assist IBM and customers with Requirements Management and CLM (Collaborative Lifecycle Management). Has successfully migrated over 15 DOORS Databases to DOOR NextGeneration, and is an IBM Certified Rational DOORS Next Generation expert.



