

Roy Sterritt “Short Bio” for ICAS 2020 Keynote

Biography—Roy Sterritt is a member of Faculty in Computing and Engineering at Ulster University. He spent several years in industry with IBM, first at their UK headquarters in Portsmouth, and then at the IBM Hursley Labs in Winchester. Initially he was a Software Developer in their KBS department but then became a Product Development Manager with responsibility for tools to support risk assessment and project management in personal and mobile environments which were used widely in the UK and US. Roy’s academic research career began in 1996 when he was appointed to the first of a series of joint University of Ulster and Nortel research projects investigating parallel, automated and intelligent approaches to the development and testing of fault management telecommunications systems.

Roy’s main focus of research is Systems and Software Engineering of Autonomic (Self-Managing Computer-Based) Systems, essentially a research area developed from a call from industry to deal with the complexity and total cost of ownership of our systems of systems (IBM 2001). To date he has 200+ publications in the field including research collaborations with NASA, IBM TJ Watson Center, BT, SAP, HP and Core Systems as well as many academic partners. The research with NASA also led to 16 US patents. He was the founding chair of the IEEE Task Force and subsequently Technical Committee on Autonomous & Autonomic Systems and elected chair of IEEE Technical Committee on Engineering of Computer-Based Systems. He has held many other IEEE roles such as; IEEE CS Publications board member, chair of the Conference Publications Operations Committee (CPOC); served on the IEEE CS Technical & Conferences Activities Board (T&C Excom and Opcom) and chaired the Conference Advisory Committee (CAC). He has been appointed to the many editorial boards including the NASA Journal on Innovations in Systems and Software Engineering, ACM Transactions on Autonomous and Adaptive Systems (TAAS), AIAA Journal of Aerospace Computing, Information, and Communication, Journal of Autonomic and Trusted Computing, and Multiagent and Grid Systems - An International Journal; and served on steering and/or program committees of the majority of the conferences in his field at some stage during the last 20 years.

This extensive research community activity and NASA collaboration during the *noughties* led to the common query from colleagues and management “are you ever at home?”. As such Roy scaled back his international activity during the *tens* and took on institutional roles such as; Placement Coordinator-looking after 400+ students while seeking and on year-long industrial placement; Manager of CPPD (Continuous Personal and Professional Development) including developing outreach courses and summer schools in both Computer Science and Space Science. Yet with 16 patents with NASA, Roy also took the opportunity to explore spinning out the Autonomic Research as well as continuing that research, in particular through his PhD students.