Introduction to the Software Technology Track

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Welcome to the Software Technology (ST) Track. This year we have a total of nine minitracks on a wide variety of important topics in software technology: IS education, cybersecurity, software assurance, wireless networking, agile methods, agile organizations, digital forensics, virtualization, cloud computing, and other vital emerging research areas. The nine minitracks are as follows:

Secure Cloud Computing: focuses on design issues and solutions for security aspects of cloud computing. This minitrack brings together researchers across engineering, management, social, and legal areas to discuss this paradigm shift. In this context, quality of service, availability, theft of IP and personal information, are all critical research topics.

Enlightened Cybersecurity and Software Assurance: explores the scientific foundations for a unified discipline of software assurance to improve the dependability of software systems. Assurance research focuses on achieving an acceptable level of trust and confidence through auditable evidence that software systems will be built and will function as intended in both benign and threat environments.

Wireless Networks: focuses on fundamental challenges and issues arising in wireless sensor networks and their applications. Wireless sensor nodes and networks must provide solutions to practical problems, and must be both cost-effective and an improvement over previous practice.

Software Product Lines: Engineering, Services, and Management: focuses on business models and strategies, economic valuation, organizational and process design, knowledge management practices and systems, service systems and their implications, and international standardization initiatives related to product lines.

Software Security for Mobile Platforms: this minitrack is focused on the research and automation techniques that can be applied to mobile platforms that will insure that developed software on these devices are secure while not compromising other system properties such as performance or reliability.

Agile and Lean Software Engineering: looks at building a middle ground between traditional software engineering and agile software development, called Agile Software Engineering. It attempts to find best-of-both approaches, merging where possible, and selecting one or the other where appropriate.

IS Education and Training: looks at methods and innovations for education and training. How are new IS paradigms being introduced and taught, and what are the practical means of implementing them in the classroom? What drives or degrades the demand and relevance of IS education and training?

Agile and Lean Organizations: looks at how agile development and lean product management interact with organizations, their structures, cultures and products. This includes an examination of how organizations interact with product groups, how they restructure to support agility, what cultural changes are required, what metrics are used to track such organizations, and how to markets respond to them.

Digital Forensics—Education, Research, and Practice: involves the use of software, computer science, software engineering, and criminal justice procedures to explore and or investigate digital media with the objective of finding evidence to support a criminal or administrative case. It involves the preservation, identification, extraction, and documentation of computer or network evidence.

We would like to thank our minitrack chairs and authors who once again have put together a truly compelling set of minitracks.