

Introduction to the Software Technology Track

Rick Kazman
University of Hawaii
kazman@hawaii.edu

Gul Agha
University of Illinois, Urbana-Champaign
agha@cs.uiuc.edu

Welcome to the Software Technology (ST) Track. This year we are proud to have a total of eleven minitracks on a wide variety of topics, 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.

Cybersecurity and Software Assurance: explores the scientific foundations for a discipline of software assurance to improve the software dependability. Assurance research focuses on achieving an acceptable level of trust and confidence through auditable evidence that systems will be built and will function as intended in all 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, valuation, organizational and process design, knowledge management practices, service systems and their implications, and 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 searching for “best-of-both” approaches.

Agile and Lean Organizations: looks at how agile development and lean product management interact with organizations, their structures, cultures and products, including 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: explore 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.

Analytical Software Project Management: explores business strategies, economic models, valuation, organizational and process issues, leadership, knowledge management, standardization, and other issues related to software product lines.

Open Movements: FLOSS, Open Contents, Open Access and Open Communities: addresses the adoption of open strategies for peer production, collaboration and knowledge creation. This includes issues in technical aspects of open systems and studies of ways in which the Internet affects people, groups, organizations, and societies in such systems.

CyberWarfare: Offensive and Defensive Software Technologies: aims to bring together technical and non-technical cyberwarfare researchers, academics, and practitioners in this field to discuss the mechanics and implications of offensive and defensive cyberwarfare activities.

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