Keynote

Software Measurement & The Lessons from the Masters: The Benefits for Industry

Prof. Alain Abran (École de Technologie Supérieure, University of Quebec, Canada)

Abstract

Software measurement is at least 50 years old, but how does it measure up against the use of measurement in our day to day lives and in professional activities? This presentation will identify some of the measurement criteria of the builders of the pyramids 4,000 years ago and will discuss measurement criteria in business and sciences and engineering. What characterizes measurement today in accounting and engineering, and what can software measurement learn from these masters? What are measurement benefits in governance in general, and in software governance in particular?

Dr. Alain Abran is a Professor and the Director of the Software Engineering Research Laboratory (GELOG – http://www.gelog.etsmtl.ca) at the École de Technologie Supérieure (ETS) – Université du Québec. He is currently Co-executive editor of the Guide to the Software Engineering Body of Knowledge (SWEBOK – www.computer.org/swebok) project. He is also actively involved in international software engineering standards and is Co-chair of the Common Software Metrics International Consortium (COSMIC – www.cosmicon.com).

Dr. Abran has more than 20 years of industry experience in information systems development and software engineering. The maintenance measurement program he developed and implemented at Montreal Trust, Canada, received one of the 1993 Best of the Best awards from the Quality Assurance Institute. He can be contacted at alain.abran@etsmtl.ca
Keynote

Understanding the Implications of Pair Programming
Prof. Giancarlo Succi (Free University of Bozen, Italy)

Abstract
Pair Programming is one of the most debated development practice, where alleged benefits coming from improved quality and, sometimes, increased productivity are compared with sure increased costs of development due to the simultaneous presence of two developers. Needless to say, to date we do not have a clear, objective, and quantitative understanding of the claimed benefits of such development approach. In this talk I will briefly review the existing studies and then I will present a different approach: using a new analysis technique, called L-Graphs, I will try to outline how Pair Programming influences in deep the behaviour of developers. Throughout the presentation, I will use data coming from a professional development team observed for ten months.

Giancarlo Succi is Professor with Tenure at the Free University of Bolzano-Bozen, Italy, where he directs the Center for Applied Software Engineering, is Dean of the Faculty of Computer Science, and is delegate of the Rector for ICT.

Prof. Succi holds a Laurea degree in Electrical Engineering (Genova, 1988), an MSc in Computer Science (SUNY Buffalo, 1991) and a PhD in Computer and Electrical Engineering (Genova, 1993). He has been registered Professional Engineer in Italy since 1991 and he obtained the full registration also for the province of Alberta, Canada, while residing there. The research interest of Giancarlo Succi involve multiple areas of software engineering, including (a) agile methodologies; (b) experimental software engineering; (c) open source development; (d) software product lines and software reuse.

Dr. Succi has written more than 300 papers published in international journals (more than 70), books, and conferences, and is editor of 6 books and author of 4. He has been principal investigator for projects amounting more than €5M cash and, overall, he has received more than €10M in research support from private and public granting bodies. He has been chairing and co-chairing several international conferences and workshop, member of the editorial board of international journals, and leader of international research networks. Prof. Succi is a consultant for several private and public organizations worldwide in the area of software system architecting, design, and development; strategy for software organizations; training of software personnel. Giancarlo Succi is a Fulbright Scholar.