ICPE 2017 Tutorials Chair's Welcome

It is our pleasure to welcome you to the ICPE 2017 Tutorial Track, through which ICPE enhances the experience of attending researchers and industry professionals by proposing tutorials led by renowned scientists and practitioners in the fields of relevance for the ICPE community.

We are looking forward to the five tutorials that will be presented on Saturday 22 and Sunday 23, April 2017 in L'Aquila, Italy. The tutorials will run concurrently in two tracks on both days. The topics of the tutorials cover a spectrum of areas that we expect to be of significant interest to a large number of ICPE 2017 attendees.

The tutorial by Christoph Heger, André van Hoorn, Mario Mann, and Dušan Okanović will focus on application performance management (APM) in industrial practice and academic research. The speakers will present the ways to collect data and perform analysis using available commercial and open-source APM tools.

Salman Baset, Marcio Silva, and Nicholas Wakou will present an overview of the SPEC Cloud IaaS 2016 benchmark, which is the first industry standard benchmark that measures the performance of infrastructure-as-a service clouds.

The tutorial by Kingsum Chow and Wanyi Zhu will focus on software performance analytics in the cloud. The speakers will address the challenges of measuring software performance in the data center and optimizing software for resource management by bringing the knowledge of software performance monitoring in the data center to the world of applying performance analytics.

Alberto Leva will introduce in his tutorial the basics of system and control theory so as to foster their utilization for the management, but most important for the design, of computing systems. The tutorial focus will be set on the systems and control theory as a forma mentis rather than a source of algorithms.

The tutorial by André Bauer, Nikolas Herbst, and Samuel Kounev will guide the attendants step-by-step through the design and evaluation of a proactive and application-aware auto-scaling mechanism. Throughout the tutorial, the speakers will also present the related tools that are available online for the construction of the auto-scaler building blocks and their evaluation.

A total of eight tutorial proposals were submitted to the ICPE 2017 Tutorials track from which five were finally accepted. All the proposals were reviewed by the chair and the final selection was approved by the ICPE 2017 General Chairs. We are grateful to the ICPE community for the diverse and high-quality proposals we received. This guarantees a strong Tutorials Track program at ICPE 2017 and we hope you will it interesting, thought-provoking, and useful for your work. In this volume, you will find the companion papers that provide a commented outline of the tutorials.

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