WEPPE Chairs’ Welcome

To evolve, and possibly also to survive in the new world of MOOCs and bootcamps, technical higher education needs to address various issues, caused by difficulty and abstraction that do not seem to attract a balanced student body, by a possible gap between taught material and industry expectations, and by new didactical needs spurred by new student cohorts and (multi-)cultures. Addressing these issues, the goal of the Workshop on Education and Practice of Performance Engineering (WEPPE) is to bring together University researchers and Industry Performance Engineers to share education and practice experiences. We are interested in creating opportunities to share experiences between researchers that are actively teaching performance engineering and of Performance Engineers that are applying Performance Engineering techniques in industry.

The topics of interest of WEPPE include, but are not limited to, education and/or practice of: performance in the data center, cloud, and Internet of Things; performance methods in software development; model-driven performance engineering; performance modeling and prediction; performance measurement and experimental analysis; benchmarks (workloads, scenarios, and implementations); run-time performance and capacity management; performance in cloud, virtualized, and multi-core systems; performance-driven resource and power management; performance of big data systems; performance modeling and evaluation in other domains; performance requirements specification; performance testing and validation; relationship between performance engineering and architecture; all other topics related to performance engineering.

The first edition of WEPPE includes 1 keynote, 5 full presentations, and 1 panel. The keynote by Kishor Trivedi provides a multi-decade view on performance-engineering education. The work presented by a team at Alibaba focuses on the gap between expected knowledge out of higher education and the perceived level of fresh graduates; they propose a cross-disciplinary training programme for effective software performance analysis. In her work, Vittoria de Nitto Personé discusses if we have reached the point where performance engineers can be trained in well-established methods, or the field still needs to form students who challenge every assumption and push for new designs. The team of Lubomír Bulej, Vojtěch Horký and Petr Tuma discusses the gap between theoretical statistics and the practice of experimentation, both vital to performance engineering and taught in higher education, but sometimes not internalized by graduates. The work of Andre Bondi focuses on cultural and multi-disciplinary aspects of performance engineering, for example focusing on the level of performance engineering education in countries where post-graduate education is not common and on the relationship between performance requirements engineering, testing, architecture, and modeling in principle and in practice, respectively. In his work, Giuseppe Serazzi investigates multiple decades of evolution and integration of performance engineering in the core curriculum of computer science, and systems in particular. The high-quality panel, “Mind the Gap (Between Education and Practice)”, facilitates the debate between the audience, and Alberto Avritzer, Andre Bondi, Kingsum Chow, Vittoria De Nitto Persone, Giuseppe Serazzi, Kishor Trivedi, and Petr Tuma, on the key topics of WEPPE 2017.

We thank all submitters and attendees and we are looking forward to a successful new edition in 2018.

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