ICSEA 2012

Forward

The Seventh International Conference on Software Engineering Advances (ICSEA 2012), held on November 18-23, 2012 in Lisbon, Portugal, continued a series of events covering a broad spectrum of software-related topics.

The conference covered fundamentals on designing, implementing, testing, validating and maintaining various kinds of software. The tracks treated the topics from theory to practice, in terms of methodologies, design, implementation, testing, use cases, tools, and lessons learnt. The conference topics covered classical and advanced methodologies, open source, agile software, as well as software deployment and software economics and education.

The conference had the following tracks:

- Advances in fundamentals for software development
- Advanced mechanisms for software development
- Advanced design tools for developing software
- Advanced facilities for accessing software
- Software performance
- Software security, privacy, safeness
- Advances in software testing
- Specialized software advanced applications
- Open source software
- Agile software techniques
- Software deployment and maintenance
- Software engineering techniques, metrics, and formalisms
- Software economics, adoption, and education
- Business technology
- Improving research productivity

Similar to the previous edition, this event continued to be very competitive in its selection process and very well perceived by the international software engineering community. As such, it is attracting excellent contributions and active participation from all over the world. We were very pleased to receive a large amount of top quality contributions.

We take here the opportunity to warmly thank all the members of the ICSEA 2012 technical program committee as well as the numerous reviewers. The creation of such a broad and high quality conference program would not have been possible without their involvement. We also kindly thank all the authors that dedicated much of their time and efforts to contribute to the ICSEA 2012. We truly believe that thanks to all these efforts, the final conference program consists of top quality contributions.

This event could also not have been a reality without the support of many individuals, organizations and sponsors. We also gratefully thank the members of the ICSEA 2012 organizing committee for their help in handling the logistics and for their work that is making this professional meeting a success.

We hope the ICSEA 2012 was a successful international forum for the exchange of ideas and results between academia and industry and to promote further progress in software engineering research.

We hope Lisbon provided a pleasant environment during the conference and everyone saved some time for exploring this beautiful city.

ICSEA 2012 Chairs

ICSEA Advisory Chairs

Herwig Mannaert, University of Antwerp, Belgium Jon G. Hall, The Open University - Milton Keynes, UK Mira Kajko-Mattsson, Stockholm University & Royal Institute of Technology, Sweden Luigi Lavazza, Università dell'Insubria - Varese, Italy Roy Oberhauser, Aalen University, Germany Elena Troubitsyna, Åbo Akademi University, Finland Luis Fernandez-Sanz, Universidad de Alcala, Spain Michael Gebhart, Gebhart Quality Analysis (QA) 82, Germany

ICSEA 2012 Research Institute Liaison Chairs

Oleksandr Panchenko, Hasso Plattner Institute for Software Systems Engineering - Potsdam, Germany Teemu Kanstrén, VTT Technical Research Centre of Finland - Oulu, Finland Osamu Takaki, Japan Advanced Institute of Science and Technology (JAIST) – Ishikawa, Japan Georg Buchgeher, Software Competence Center Hagenberg GmbH, Austria Simon Tsang, Telcordia - Piscataway, USA

ICSEA 2012 Industry/Research Chairs

Herman Hartmann, University of Groningen, The Netherlands Hongyu Pei Breivold, ABB Corporate Research, Sweden

ICSEA 2012 Special Area Chairs

Formal Methods Paul J. Gibson, Telecom & Management SudParis, France

Business and process techniques

Maribel Yasmina Santos, University of Minho, Portugal

Testing and Validation

Florian Barth, University of Mannheim, Germany