Welcome from the Conference Chairs

It is our pleasure to welcome you to the 2012 IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC), which is being held at the Congress Innsbruck Center in Innsbruck, Austria. The conference location offers ample opportunities for sightseeing in the historical old town of Innsbruck and outdoor activities in the Inn valley and the surrounding Alps.

For VL/HCC 2012 we have assembled an excellent technical program, which is complemented by one workshop, one tutorial, and a Graduate Consortium. This year’s conference is co-located with the ACM/IEEE International Conference on Model Driven Engineering Languages and Systems (MODELS), which offers even more opportunities to attend high-quality research presentations and additional workshops.

Two highlights of this year’s program are the keynote addresses delivered by two renowned researchers. Professor Alan Blackwell, from the Cambridge University Computer Laboratory, has made significant research contributions to the Visual Languages and HCI communities. He was one of the founders of the Diagrams conference series and serves on the Editorial Board of the Journal of Visual Languages and Computing. Professor Blackwell will deliver the opening Keynote talk entitled Computational Thinking and Creative Practice. Professor David Harel, from the Weizmann Institute of Science in Israel, has made pioneering contributions to visual languages research, having invented the widely used Statecharts notation. He has received a number of awards for his research, including the Emet Prize (2010). Professor Harel will deliver the closing keynote entitled Some Thoughts on Executable Visual Languages and their Interfaces.

VL/HCC 2012 received 53 full paper submissions and a further 21 short paper submissions from authors spanning 25 countries. These papers were independently and anonymously reviewed by three members of the Program Committee. This process was followed by extensive discussion amongst the reviewers and the Program Co-Chairs. After the first round of reviews, the authors were invited to submit rebuttals; this was followed by further discussions among the reviewers. At the end of this process, the Program Co-Chairs selected 15 full papers and 9 short papers, for a full-paper acceptance rate of 28%. In addition, a further 9 full papers were accepted as short papers.

At the conference, these 33 papers are organized into eight sessions addressing a diverse range of topics. The session on spreadsheets and tables, reflects the fact that spreadsheets, as a wide-spread end-user language, have become a regular topic in the conference series. Several other end-user languages for particular application areas will be presented in a session dedicated to domain-specific languages, and innovative ways to specifying programs or to engage users will be presented in a session on new approaches to program specification. Languages and notation as a way to describe computation has long played a central role in VL/HCC, and this is not different this year. We have two sessions on notation, one with a focus on design, and the other with a focus on symbols. Another key topic of the VL/HCC conference is the study of end users, which is the subject of several papers, this year with a particular focus on mobile devices. Moreover, the view that computation can manifest itself in groups of interacting people
is reflected in several papers that are presented in a session on social computing. Finally, the junction of languages and users is the subject of several papers that are presented in a session on code understanding.

This year the VL/HCC Graduate Consortium features 10 student presentations organized in 4 sections including visual and end-user programming aspects of Software Engineering, Modeling, Security and Drawing. The program is completed with an interactive section of 5 demos and 16 posters.

As with any organizational task of this scale, numerous people have contributed to making VL/HCC 2012 a success. Our tasks as General Chair and Program Co-Chairs could not have been accomplished by us alone. We would particularly like to thank the Program Committee, acknowledged on the following pages, for their careful and thoughtful consideration of the submitted papers and for their excellent engagement with the ensuing debate. In some cases, the Program Committee invited other experts to review papers, and we gratefully acknowledge their contributions.

We would also like to thank the following individuals: Claudia Ermel of the Technische Universität Berlin, Germany, and Paolo Bottoni of the Sapienza University of Rome, Italy, who successfully organized the satellite program with one workshop, one tutorial and the interactive session with posters and demo; Vittorio Fuccella and Fabrizio Torre who did an excellent job as Publicity Chair and designing and managing the Web site, respectively; Mattia De Rosa who greatly helped with the registration management and the compilation of this proceedings; Anja Niedworok of the University of Innsbruck, Austria, who, as the local arrangement chair, suggested all the best in Innsbruck for this event and Maria Rizzo from the University of Salerno for her support in the organization. In addition, for organizing the Graduate Consortium we also thank Margaret Burnett of the Oregon State University, USA, Stéphane Convery of the Université de Toulouse, France, Andrew Fish of the University of Brighton, UK, and, in particular, Emerson Murphy-Hill of the North Carolina State University, USA, who secured National Science Foundation support for the event.

We also would like to thank our sponsors. These include the IEEE for assisting with the organizational and financial aspects of the conference; The National Science Foundation for financially supporting the Graduate Consortium; the Province of Tyrol and the City of Innsbruck for partially supporting the conference reception; Microsoft Research, ItalSystem s.r.l., UniCredit for their financial support and the University of Salerno and its Department of Computer Science for the financial and organizational support. Finally, we thank our media partner, interaction-design.org, for helping us in advertising our event.

We hope that you find the symposium and its co-located events intellectually stimulating. We are confident that these proceedings provide a useful scientific reference for years to come.

Gennaro Costagliola
General Chair

Martin Erwig and Gem Stapleton
Program Co-Chairs