

Welcome Message from the RE'18 Chairs

Welcome to RE'18! The 26th edition of the premier IEEE International Requirements Engineering Conference takes place on August 20 to 24, 2018, in Canada. RE'18 brings together around 250 researchers, practitioners, educators, and students to present and discuss the most recent research results, innovations, experiences, and concerns in the discipline of requirements engineering. RE'18 is held at the Banff Centre for Arts and Creativity in the gorgeous Banff National Park, one of Canada's oldest and most popular tourist destinations. Known for its breathtaking mountainous surroundings and hot springs, Banff is a prime destination for outdoor sports and features extensive hiking, biking, and mountain climbing opportunities.

This year's RE theme is "*Crossing Boundaries and Increasing Impact*". While being focused on requirements engineering, we also open the door to innovation and new perspectives on our discipline. RE is inherently a multidisciplinary discipline: interfacing problems understanding and solutions design while involving all types of stakeholders. Yet, the boundaries between research, academia, industry, open (source) communities, and government, as well as those between software engineering and other areas (including system engineering, design, artificial intelligence, and management communities) deserve more attention. Crossing such boundaries and others between different methods and different application domains can help increase the impact of RE research and techniques on practitioners' lives and on the society in general.

The conference theme is reflected in this year's rich program, with over 70 talks about RE-related scientific contributions to research, industrial innovation, RE@Next!, and a data challenge/showcase. There are also keynote presentations, posters and tool demos, panel discussions, and journal-first presentations. The pre-conference program consists of an industry day, 12 workshops, 6 tutorials, a doctoral symposium, and an RE Cares event.

We are excited to have three distinguished and inspiring keynote speakers with talks related to this year's theme:

- On Wednesday, *Jane Cleland-Huang* (University of Notre Dame, IN, USA) addresses the challenges and opportunities introduced by *disruptive change* in the current requirements engineering landscape.
- On Thursday, *Gail C. Murphy* (Tasktop Technologies Inc. and UBC, Canada) explores how the ideas of value streams are being applied to software development (and DevOps) and how the requirements community is key to enabling an increased focus on the delivery of value.
- On Friday, *Krzysztof Czarnecki* (University of Waterloo, Canada) discusses RE in the age of Societal-Scale Cyber-Physical Systems (with an automated driving example) and the need for a data-driven, continuous, and values-based RE in such context.

In total, the RE'18 main conference attracted 182 paper submissions: 90 in Research, 22 in Industry Innovation, 37 for RE@Next!, 7 for the Data challenge/showcase, 11 for the Doctoral Symposium, 13 for Posters & Demos, and 2 panels. Each paper was independently reviewed by members of the track's program committee (PC) and was the subject of an online discussion by its reviewers and other members of the PC.

For Research papers, we introduced this year a triple-blind review process to mitigate potential biases related to the reputation of authors and of reviewers, focus the review process on content, and depersonalize research and knowledge sharing. We also extended the paper length to 2 additional pages for references, and encouraged structured abstracts and additional material. Each anonymized paper was first independently reviewed and then discussed online by at least three anonymous reviewers. The PC met in person in Hamburg, Germany, on May 24th and 25th. Each paper having at least one positive review was the subject of a discussion at the PC meeting. The names of the reviewers and authors were only revealed at the meeting, and the PC members with a conflict of interests with the authors of a paper were absent from the discussion of that paper. In total, 24 research papers (27%) were accepted. The PC meeting in Hamburg was preceded by a one-day event, the *Hamburg Requirements Engineering Symposium*, where PC members, local professionals, and students attended and gave presentations. We take this opportunity to thank Christoph Stanik and Carina Volkmer for helping organize the symposium and the PC meeting.

This year, the industry papers are renamed to Industry Innovation papers to stress the nature and importance of these contributions to the RE community. Industry Innovation papers were also allowed 10+2 pages. Each paper was evaluated by three PC members, and an online discussion was used to determine which papers to accept. A total of 8 papers were accepted (36%). The RE@Next! papers were evaluated by 3 PC members through a double-blind process, also new this year. An online discussion led to a selection of 9 papers (24%). The Data Chairs and their committee accepted 5 papers, the Doctoral Symposium Chairs accepted 8 submissions, and the Posters & Demo Chairs and their committee accepted 7 contributions.

We received submissions from 505 authors located in 38 countries: 47% from Europe, 25% from North-America, 18% from Asia, 8% from South-America, 2% from Oceania, and 0.4% from Africa. Accepted papers are distributed as follows: 24% from the USA, 10% from Germany, 9.6% from Canada, 9.6% from Switzerland, 6.4% from UK, and 40% from other countries. Overall, 21 countries are represented in the main program, and many other countries are represented in the workshops and other events.

For the first time, we also invited authors of papers published in recognized journals, but not previously presented at conferences, to come present their work during the RE conference. These papers are identified as “Journal-First” in the program, and are presented in the sessions that contain Research and Industry Innovation papers. Three reputable journals were considered this year: Springer’s *Requirements Engineering*, *IEEE Transactions on Software Engineering*, and Elsevier’s *Information and Software Technology*. Scopus was used to extract papers published between 2016 and 2018 in these journals, that contained “requirement*” in their title, abstract, or keywords. After removing papers from special issues and extended abstracts, a total of 154 papers were inspected by a program committee formed of four members plus the two RE Program Co-chairs. A voting scheme was used to prioritize the papers to invite. A total of 6 papers were selected through that process. These papers are already published and are thus not included in these proceedings. Participants are however invited to read them online [1-6].

RE'18 offers a unique *Industry Day* that will bring together entrepreneurs across industry sectors. The exciting lineup of keynote speakers (including Travis Stevens and a tutorial by Karl Wieggers), academic, industry and vendor presentations, panel discussions, together with vendor and peer networking opportunities, will both inspire and equip participating professionals evolve their organizational requirements engineering practices into a key competitive advantage.

Finally, *RE Cares* is a new multi-day opportunity for conference participants to integrate top notch research and address problems of societal interest.

We are very thankful to the whole RE'18 organizing committee and other volunteers. We also express our appreciation to our hard working Program Committees (and awards committees) who spent many hours reviewing and discussing papers. Finally, we are thankful to all authors and attendants who contributed to the program sharing their work, findings, and feedback with the community to continue advance the field of requirements engineering and related fields.

Last but not least we highly acknowledge the contributions of our conference sponsors. In particular, we would like to thank Intel Inc., Tata Consulting Services and the University of Calgary Schulich School of Engineering serving as platinum, gold, and silver sponsors, respectively.

Enjoy RE'18!



Guenther Ruhe, General Chair



Walid Maalej & Daniel Amyot, Program Chairs

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