

## **CrowdRE'19: 3<sup>rd</sup> International Workshop on Crowd-Based Requirements Engineering** In conjunction with RE'19 – 23, September 2019, Jeju Island, South Korea

**Motivation & Goal** The rise of mobile, social and cloud apps poses new challenges and opportunities to the field of requirements engineering (RE). Traditional RE techniques have difficulties scaling up to settings with a 'crowd' of thousands up to millions of users of a (software) product. The crowd is an interesting source for RE because it produces user feedback in texts and usage data. Being able to respond quickly, effectively and iteratively to the requirements, problems, wishes and needs identified in user feedback can increase a product's success. Crowd-Based RE (CrowdRE) seeks to provide RE with suitable means for this crowd paradigm.

The Third Workshop on Crowd-Based Requirements Engineering (CrowdRE'19) builds on the successes of its previous editions, which unified the visions into a coherent RE approach (CrowdRE'15), established a roadmap and shared resources (CrowdRE'17), and strengthened relationships to artificial intelligence techniques (CrowdRE as special focal topic of AIRE'18).

**Submissions** CrowdRE is looking for general submissions containing original research (3 - 6 pages LNCS). See the workshop website for details on all paper categories we accept. Each submission will be reviewed by three reviewers.

### **Important Dates (AoE-Time)**

Paper Submission: 5 July 2019  
Paper Notification: 25 July 2019  
Camera Ready Due: 8 August 2019

### **Program Committee**

- Nirav Ajmeri, North Carolina State University (USA)
- Raian Ali, Bournemouth University (UK)
- Travis D. Breaux, Carnegie Mellon University (USA)
- Sjaak Brinkkemper, Utrecht University (Netherlands)
- Fabiano Dalpiaz, Utrecht University (Netherlands)
- Joerg Doerr, Fraunhofer IESE (Germany)
- Xavier Franch, Uni. Politècnica de Catalunya (Spain)
- Vincenzo Gervasi, University of Pisa (Italy)
- Emitzá Guzmán, University of Zurich (Switzerland)
- Mahmood Hosseini, JP Morgan (UK)
- Marjo Kauppinen, University of Helsinki (Finland)
- Fitsum M. Kifetew, Fondazione Bruno Kessler (Italy)
- Eric Knauss, University of Gothenburg (Sweden)
- Soo Ling Lim, University College London (UK)
- Itzel Morales Ramírez, Infotec (Mexico)
- Pradeep K. Murukannaiah, RIT, (USA)
- Marc Oriol, Uni. Politècnica de Catalunya (Spain)
- Anna Perini, Fondazione Bruno Kessler (Italy)
- Kurt Schneider, Leibniz Uni. Hannover (Germany)

### **Organizing Committee**

- Eduard C. Groen, Fraunhofer IESE (Germany)
- Meira Levy, Shenkar College of Eng. Des. Art. (Israel)
- Anas Mahmoud, Louisiana State University (USA)
- Norbert Seyff, University of Zurich (Switzerland)

### **Key Questions**

- What are the achievements and contributions of CrowdRE approaches thus far? How do they contribute to improving RE?
- What are the risks of going beyond the borders of the 'brown field' domain of RE?
- How can CrowdRE be applied in industry settings? In which parts of the software development lifecycle can CrowdRE play a vital role? Which parts are less suited, and why?
- What are the central application domains for a CrowdRE approach? What are typical Use Cases in which CrowdRE is applied?
- How can a holistic solution be provided for a practical application of CrowdRE?
- How can data from such a large group of stakeholders be obtained and interpreted? How can ambiguity and subjectivity be mitigated?
- How can the reliability of individual crowd members and of the data in general be determined?
- In what way can crowd members be motivated to contribute the user feedback we require of them?
- Assuming that the stakeholders form a crowd, how are requirements best elicited, documented, validated, negotiated and managed? How are data from the crowd best obtained and interpreted?
- In what way could techniques from Big Data analytics be leveraged to analyze heterogeneous and large datasets as a new source for new/changed requirements?
- Where do the opportunities to collaborate lie? To what extent can the various fields of work be integrated, and where will approaches remain different?

### **Themes of Interest**

- Crowd-based Requirements Engineering (CrowdRE)
- Analysis of user feedback for RE using Big Data
- Natural language processing, Information Retrieval, (supervised and unsupervised) Machine Learning, ontologies
- Crowd-based monitoring and usage mining approaches
- Case studies and Use Cases involving CrowdRE
- The contribution of CrowdRE to prioritization, software adaptation, testing and other software engineering aspects
- The intersection of RE and domains such as sociology, psychology, human factors, and anthropology
- Approaches to motivate, steer, and boost creativity in the crowd and understand, diversify and engage a crowd for RE
- Automated RE and the role of the requirements engineer
- Automated RE and data (safeguarding rollback, privacy, traceability and data integrity; measuring validity, reliability, source quality; processing of rejected data)
- Platforms and tools supporting CrowdRE