### **Call for Papers**

# CrowdRE'20: 4th International Workshop on Crowd-Based Requirements Engineering

In conjunction with RE'20 - August 31st - September 4th, 2020 in Zurich, Switzerland

Motivation & Goal The rise of mobile, social and cloud apps required requirements engineering (RE) to adapt itself. The traditional methods of RE are very inefficient in situations involving thousands to millions of current and potential 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 Fourth Workshop on Crowd-Based Requirements Engineering (CrowdRE'20) 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), strengthened relationships to artificial intelligence techniques (CrowdRE as special focal topic of AIRE'18), and redefined its scope (CrowdRE'19).

Submissions CrowdRE is looking for general submissions containing original research (2-3 pages short; 4-6 pages full). 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 extended to 29 May 2020
Paper Notification: 22 June 2020
Camera Ready due: 13 July 2020
Workshop: 1 September 2020

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#### **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 Interests

- 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