Welcome to the Fourth International Workshop on Learning from Other Disciplines for Requirements Engineering (D4RE'20)

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It is our pleasure to welcome you to the fourth edition of the International Workshop on Learning from other Disciplines for Requirements Engineering (D4RE'2020) - co-located with the 28th IEEE International Conference on Requirements Engineering and held on August 31st 2020 in Zurich, Switzerland.

Motivation and Goal: The core motivation of the D4RE workshop series 1 is to bring together a diversity of people who are interested in discussing the question "What can requirements engineering (RE) learn from other disciplines?". In the previous editions of the D4RE workshop series, we gained valuable insights with regard to other disciplines and their synergy potential to RE during presentation sessions and interactive breakout sessions.

In this fourth edition we aim to further enrich our existing body of ideas and identify new synergies of non-SE disciplines with RE - possibly inspired by completely new disciplines such as sports, psychology or medicine. Moreover, as a special theme of this fourth edition, we aim to explicitly examine the reverse synergy direction by discussing the question "What can other disciplines learn from RE?". We consider this reverse direction as a valuable complement to our existing results as such "win-win" synergies might serve as a valuable starting point to motivate and foster future collaborations between the RE community and communities of other disciplines - both in academia and industry project contexts.

The overall workshop topic and its intended outcomes are well in line with the overall theme of RE'20 as in the context of the digital transformation it is more important than ever to holistically understand future system users and other stakeholders. That is, it is essential for the RE community to provide suitable methods that enable gaining a deep understanding of the needs and fears as well as the social and living context of a diversity of stakeholders. To enrich the

existing body of RE methods and techniques supporting these activities, it is surely beneficial looking across the boundaries of "traditional" RE approaches and get inspiration from other disciplines or professions such as psychology, sports, or criminology.

Workshop History: The first successful edition of the D4RE workshop was collocated with RE'18 in Banff, Canada. Together with 15 participants, we selected three disciplines out of an existing body of ideas, namely journalism/writing, socializing, and law. In the breakout session, we discussed and elaborated ideas for new RE techniques adapting best practices from the selected disciplines with the help of creativity techniques. Besides a visionary description of an adapted RE activity, we identified open issues, possible risks, and future research activities to shape the initial ideas for the RE techniques.

The second edition was collocated with REFSQ'19 in Essen, Germany. In this workshop, a former police officer working as an RE consultant at that time gave the audience insights into the daily work of a police officer, sharing his experience in applying techniques such as profiling, crime scene investigation, as well as securing of evidence. Moreover, he shared his view on how RE elicitation techniques such as interviews and workshops could benefit from (psychological) questioning techniques typically applied during interrogations. These insights served as inspiration to the subsequent breakout session to elaborate ideas for new RE methods / techniques inspired by best practices from the police domain.

In the third edition, that was collocated with RE'19 in Jeju Island, South Korea, we further enriched our existing body of ideas and synergies between non-SE disciplines and RE, particularly inspired by famous characters or people acting in movies / TV series, or simply the discipline "fiction".

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Workshop Program: Similar to the previous editions, the D4RE'20 workshop will be a one-day workshop organized into four 1.5-hour sessions. The major part of the workshop will consist of interactive breakout sessions in which the participants will be guided by suitable (creativity) techniques and material to collaboratively discuss and elaborate bidirectional synergies between other disciplines and RE-related activities in working groups of 4-6 people. As inspiration to these breakout sessions, the workshop program will be enriched by presentations and discussions of two accepted papers. While the first paper illustrates experiences and lessons learned from the application of best practices from other disciplines in the RE context (particularly from the application of the "jobs-to-be-done" framework during requirements elicitation and specification) the second paper illustrates the reverse direction, i.e., what other disciplines (particularly teaching visualization courses) could learn from RE. Furthermore, we are very pleased that Daniel Berry has accepted our invitation to give an inspiring keynote that is well in line with the special theme of this fourth edition. This keynote - entitled "Lessons Learned from and for Requirements Engineering and Building Construction: A Case Study of Requirements Engineering for a Synagogue Kitchen with Use Cases and Scenarios" - provides a set of lessons learned for RE and for Architecture, Engineering, and Construction.

Committees: This fourth edition was organized by Anne Hess (Fraunhofer IESE, Germany), Marcus Trapp (Fraunhofer IESE, Germany), Oliver Karras (Leibniz University Hannover, Germany), and Norbert Seyff (University of Applied Sciences and Arts Northwestern Switzerland & University of Zurich, Switzerland). We would like to thank all program committee

members for their support and dedication regarding the valuable and timely paper reviews.

The program committee consisted of

- Daniel Berry, University of Waterloo, Canada
- David Callele, University of Saskatchewan, Canada
- Maya Daneva, University of Twente, Netherlands
- Andrea Herrmann, Dortmund University of Applied Sciences and Arts, Germany
- Anne Hoffmann, Siemens Logistics GmbH, Germany
- Eric Knauss, University of Gothenburg, Sweden
- Matthias Koch, Fraunhofer IESE, Germany
- Christopher Lankeit, HELLA GmbH & Co. KGaA, Germany
- Barbara Paech, University of Heidelberg, Germany
- Yen Dieu Pham, University of Hamburg, Germany
- Kurt Schneider, Leibniz University Hannover, Germany
- Christoph Settelen, informed innovation, Switzerland

In total, we received two submissions that were both accepted by the program committee members. We are very grateful to the authors who submitted their ideas to the workshop. Last, but not least, our thanks go to the RE 2020 workshop chairs, particularly Sepideh Ghanavati and Luciano Baresi, for their continuous and friendly support in organizing this workshop. We look forward to the workshop and hope that you will find the workshop results and proceedings inspiring and valuable.