

Call for Papers

ASQT 2017

15th Conference for Software Quality, Test und Innovation

Graz University of Technology
Aula – Main Hall

November 9th – 10th, 2017

www.asqt.org



No transformation take place in such a rapid pace like the current development of the digital society. We contribute to this process unknowingly by using Smartphones, liking things on social media platforms, using search engines, and ordering via online shops. Connected to other data sources like CCTV, digital public administration, healthcare information and leisure behaviour, it is possible to predict every future human behaviour, especially educational-, driving-, working-, shopping-, leisure time behaviour or the behaviour regarding polls. This development to a digital society is a big challenge in cases of quality, in particular data quality.

The production of digital data has increased dramatically – every click, every step, every heartbeat is storable today. The large amount of data and the related options of usage are described by the buzzwords “big data” and “artificial intelligence (AI)”. There are hopes and fears related to these words. On the one hand, the data pools are useable to steer flows of machines, processes, products, energy and traffic in an optimal way. On the other hand, there are problems with personal data: Are there any inferences between the originator and the data in case of anonymized data? Who owns the data? Which kind of desires are developed by the public sector to gather this data? How is quality of the data?

Many practical problems can be efficiently solved with artificial intelligence. One example is automation of tagging. Thereby AI decides if the picture, for example, is a skiing or a beach photo. In the intermediate terms, AI will automate and substantially change whole job profiles.

At present, there are many isolated knowledge bases, a circumstance which prevents an implementation from big data to business decisions. Information is stored, changed and maintained separately. AI is a way to combine the data and enables other applications a further processing of the data. Can a better data quality be achieved by connecting the data stores and unifying the modification and the update of data?

Besides the acceptance of AI by the people, another important aspect will play an important role in determining the further proceeding with AI and how much AI interferes our daily life:

Who has the responsibility for the decisions and actions made by AI in legal and moral terms?

Contributions to ASQT 2017

The organizer and the program committee invites to make contributions in the provided topics. Contributions could be in form of a case study or an extended abstract.

Scientific Contributions

Extended Abstracts refer to scientific findings, such as master thesis, PhD thesis, contributions to scientific conferences or scientific journals, and works out the relevance to companies and the society. Extended Abstracts will be selected by the program committee and all articles will be published in a proceedings (CEUR Workshop Proceedings). Extended Abstracts must be submitted in English and should not exceed eight A4 pages (font size 11 pt, content, references)

Case studies

A case study describes an application of present best practices and its implementation into a company or pilot project. The contributions report about challenges within and present and discuss solutions in cooperate environments. Case studies can be submitted in German or English. (font size 11 pt, 1 cover page, 1 page motivation of the case study)

Submissions

Submissions can be provided by scientists or practitioners in form of an extended abstract or a case study (until 23rd of June 2017). The submissions should be send to submission@asqt.org specifying the form (extended abstract or case study) as PDF or Word document complying to formatting guidelines.

Conference

The conference languages are German and English. Submissions related to software quality are welcome for example:

Platforms for SW-Development & Operation

1. Software Assembly Lines (Continuous-Integration, -Delivery, -Deployment)
2. Software/Platform/Infrastructure as a Service (XaaS)
3. DevOps
4. scalability, costs, productivity
5. Product- u. Service-Development
6. Information security

AI Applications

7. Intelligent/Learning systems (e.g. Deep Learning, Recommendation, Document-based Discovery, Semantic Search, Digital Media Insights, etc.)
8. Predictive Analytics/Maintenance
9. Use Cases/Success Stories
10. Application fields (tourism, medicine, automotive, energy sector, ...)

Digital Transformation

11. Technology Assessment
12. Customer Journey Mapping
13. IT/Business alignment
14. Lean startup vs. copycatting business models
15. Roadmaps for integrating and dismounting legacy

Software Quality Engineering

16. Test methodology (data quality, AI Applications)
17. Managed Testing Services
18. Data quality und Big Data
19. Code quality
20. Software measuring
21. Test automation (continuous testing, test pyramid, test case design & generation)
22. Maturity models for Digital Transformation and DevOps
23. Solution validating through crowd testing
24. Migration of Legacy Software

We especially encourage submissions in the field of AI and Big Data.

Organizer:

Graz University of Technology, Cicero Consulting GmbH

Conference Chair:

Dr. Bernhard Peischl, MMag. Dietmar Wuksch

Important Dates:

Submission Deadline for Extended Abstracts: June 23, 2017

Notification Due: August 16, 2017

Conference: November 9 – 10, 2017

Program Committee:

The program committee will be published on www.asqt.org.

Organization Committee:

Bernhard Peischl, Graz University of Technology

Dietmar Wuksch, Cicero Consulting

Petra Pichler, Graz University of Technology

Oliver Tazl, Graz University of Technology