Software Quality Days 2022
January 18.-20, 2022, Vienna, Austria

Call for Papers
Scientific Program
www.software-quality-days.com

The 14th Software Quality Days (SWQD) conference and tools fair – one of the largest software quality conferences in Europe - will bring together researchers and practitioners from business, industry, and academia working on quality assurance and quality management for software engineering and information technology.

In 2022, the SWQD conference hosts the 11th scientific program on research and industry experience. The guiding topic for 2022 will be **"Software Engineering with and for Artificial Intelligence".**

The conference will be organized on-site (not virtually) and celebrate lively presentations and various interactive formats. Those presentations include presentations from the previous edition of the conference proceedings, where the event was postponed due to COVID, and new submissions following the call outlined below.

Main Scientific Program

High software and systems quality are success-critical factors in engineering practices and refer to product, process, and service quality. However, quality attributes have to be embodied within individual phases of software and systems development. In distributed engineering environments, for example, various stakeholders coming from heterogeneous disciplines have to collaborate and interact efficiently. Additional quality attributes with focus on collaboration and data exchange might then apply. Mobile environments, to name another example, typically refer to product quality and include quality requirements regarding usability, interaction, safety, and security. Emerging trends in the area of Artificial Intelligence (AI) can, on the other side, focus on different quality aspects such as (a) how to embody and assure quality in AI applications or (b) how to use AI in context of quality assurance activities such as testing. In the 11th edition of the scientific program at the SWQD, we aim at exploring the various future perspectives and contemporary challenges in Software Engineering Quality with and for AI.

Following this guiding topic, we welcome contributions related to all topics about software and systems quality. Topics of particular interest – if not limited to – are meant to foster discussions on experiences and challenges of constructive and analytical quality assurance of AI-based systems as well as using AI-based approaches for quality assurance activities.

Related topics of interest for research and industrial experience papers include accordingly:
- System and software quality management methods
- Improvement of software development methods and processes
- Testing and quality assurance of software and software-intensive systems
- Process and quality assurance automation
- Requirements Engineering and Management
- Project and Risk Management
- Effort and quality estimation
- Metrics (product, process, project)
- Domain specific quality issues such as embedded, medical, automotive systems
- Novel trends in software quality
- Crowdsourcing in Software Engineering

PC Co-Chairs
- Daniel Mendez, Blekinge Institute of Technology, Sweden and fortiss GmbH, Germany
- Manuel Wimmer, JKU Linz, Austria

Steering Committee

- Dietmar Winkler, Technical University of Vienna, Austria
- Stefan Biffl, Technical University of Vienna, Austria
- Daniel Mendez, Blekinge Institute of Technology, Sweden and fortiss GmbH, Germany
- Manuel Wimmer, JKU Linz, Austria

Paper submission information

The **main scientific program** of SWQD 2022 accepts two categories of conference submissions**.** In both categories, papers with practical relevance and already conducted practical evaluation will be preferred.
- **Technical Research Papers** should describe innovative research in software quality concepts, standards, processes, methods, or tools. They should describe a novel contribution to the field or significantly improve existing solutions. The proposed solution technique or its application to this kind of problem must be novel and sound. The author(s) must provide (empirical) validation of the proposed solution, for example, a proof-of-concept and sound arguments that the solution technique will scale to real-world-sized problems. Results must be stated clearly so that the author(s) or others can further validate them in later research. A technical solution paper should also be clear about its contributions with respect to related work by others and to previous work by the author(s).
- **Industrial Experience Papers** should describe a significant experience in applying software quality technology in a real-world context and should carefully identify and discuss important lessons learned so that other researchers and/or practitioners can benefit from the experience. The author(s) should provide (empirical) evidence supporting the experience and derived conclusions.

The SWQD 2022 conference will provide **best paper awards** in both categories, i.e., technical research papers and industrial experience papers.

Publication of Papers with Springer LNBIP

The scientific program papers will be rigorously peer-reviewed for publication in the well-known research publication series Springer LNBIP (see the [LNBIP Website](#) for author instructions).

Main Scientific Program
- **Full Papers** should be 15-20 pages (in Springer LNBIP proceedings format) and include an abstract of up to 150 words.
- **Short Papers** should be 8-12 pages (in Springer LNBIP proceedings format).

The language of the scientific program is English.

Papers must contain original unpublished work, describe significant novel contributions, and provide evidence on the validation of results. In particular, reports on industrial applications are welcome. Papers must not have been previously published or submitted for review elsewhere.

All scientific program contributions will be reviewed by the international Program Committee on their scientific merit and relevance to the conference topics and may be accepted as regular or short papers. Accepted papers will be included in the proceedings, published by Springer LNBIP (abstracted/-indexed in ISI Proceedings, DBLP, EI and Scopus), and the Springer Digital library.

If accepted, papers must be personally presented at the Software Quality Days 2022 Conference by the author or one of the co-authors. The first presenting author **can participate free of charge** at the two conference days. **Additional authors/presenters can participate at a discounted partner fee.**

Paper Submission

Authors are encouraged to submit a PDF version of their paper via EasyChair (https://easychair.org/conferences/?conf=swqd2022) by selecting either:

- Main Program: Scientific Research Paper
- Main Program: Industrial Experience Paper

Please select the paper category (i.e., technical research paper of industry experience paper during the submission process). The assignment to full and/or short papers is implicitly given by the number pages per submission.

Important Deadlines

- **Paper Submission: 15.07.2021**
- Notification of accepted/rejected papers: 03.09.2021
- Camera-ready paper for Springer Publication: 17.09.2021
- Conference date: 18.-20.01.2022