



SEA4DQ 2023

SEA4DQ Workshop 2023

December 4, 2023, San Francisco, USA

The 3rd International Workshop on Software Engineering and AI for Data Quality in Cyber-Physical Systems/Internet of Things at the ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC / FSE).

Modern software relies heavily on data, utilizing it in novel and intelligent ways.. Systems like IoT, data sharing platforms, and open data portals contribute to the increased availability of data. Therefore, data quality becomes crucial as it directly affects the reliability, efficiency, and trustworthiness of software systems.

How can software engineering and artificial intelligence (AI) help manage and tame data quality issues in CPS/IoT?

This is the question we aim to investigate in the workshop SEA4DQ. The SEA4DQ 2023 workshop is the third workshop of the series and discusses novel software engineering and AI techniques that address data quality issues of modern systems. The workshop provides a forum for researchers and practitioners to exchange ideas, lessons learnt, and visions for the future.

TOPICS

- Requirements engineering for data quality
- Software architectures and frameworks for data quality management
- Software and AI solutions for data ingestion, collection, and acquisition for the sake of data quality
- Software and AI solutions for Data pre-processing, filtering, labelling, cleaning for the sake of data quality
- Software tools for data quality management, testing, and profiling
- Quantification of data quality
- Case studies evaluating existing data quality technique on real systems
- Trade-off between data quality, performance, and security

ORGANIZATION COMMITTEE

General Chair

Foutse Khomh, Polytechnique Montreal, Canada (Main Contact)

Program Chairs

Preetha Chatterjee, Drexel University, USA

Andreas Metzger, University of Duisburg-Essen, Germany

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Web Chair

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Publicity Chairs

Valentina Golendukhina, University of Innsbruck, Austria

Phu Nguyen, SINTEF, Norway

IMPORTANT DATES

- Abstract Submission: July 14, 2023
- Paper Submission: July 21, 2023
- Notification of Acceptance: August 17, 2023
- Camera-Ready Submission: August 31, 2023
- Workshop: December 4, 2023



<https://sea4dq.github.io/>

TYPES OF SUBMISSIONS

Presentation-oriented contributions (max. 10 pages) that concentrate on presenting long research papers in detail and are followed by discussions.

Discussion-oriented contributions (max. 4 pages), which – facilitated by brief presentations of short research papers – emphasize longer discussions. Discussions will be facilitated by the workshop chairs by preparing a set of guiding questions for the presenters.

Industrial experience reports (max. 4 pages), which address problems and lessons learned from practice and are accompanied by a summary paper.

SUBMISSION FORMAT: [ACM Primary Article Template](#)

All submissions must be in English and in PDF format. The accepted papers will be published in the workshop's proceedings (to appear in the ACM Digital Library). As a published ACM author, you and your co-authors are subject to all ACM Publications Policies, including ACM's new Publications Policy on Research Involving Human Participants and Subjects.

Workshop will be held as an opt-in physical event

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