

BoKSS 2021

First International Workshop on the Body of Knowledge for Software Sustainability BoKSS 2021

Co-located with the 43rd International Conference on Software Engineering
(ICSE 2021)

May 23 –29, 2021 — Virtual
<https://bokss.github.io>

Workshop Organizers

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Program Committee

- *Marco Aiello* (U of Stuttgart, Germany)
- *Vasilios Andrikopoulos* (U Groningen, Netherlands)
- *Rajkumar Buyya* (U Melbourne, AUS)
- *Coral Calero* (U of Castilla-La Mancha, Spain)
- *Fernando Castor* (Federal U of Pernambuco, Brazil)
- *Alcides Fonseca* (U of Lisbon, Portugal)
- *Lidia Fuentes* (U Malaga, Spain)
- *Danny Greefhorst* (ArchiXL, Netherlands)
- *Serge Haziyeu* (SoftServe, USA)
- *Abram Hindle* (U of Alberta, CA)
- *Grace Lewis* (SEI at CMU, USA)
- *Ivano Malavolta* (Vrije Universiteit Amsterdam, NL)
- *Claudia Melo* (U of Brasilia, Brazil)
- *Hausi Mueller* (U of Victoria, CA)
- *Olivier Philippot* (Greenspector, France)
- *Giuseppe Procaccianti* (Vandebron, Netherlands)
- *Antony Tang* (Swinburne U of Technology, AUS)
- *Colin Venters* (U of Huddersfield, UK)
- *John Whittle* (Monash U, AUS)

Important Dates

Submission Deadline: 12 January 2021
Notification of acceptance: 22 February 2021
Camera-Ready Version: 12 March 2021

With the pervasive role of software and digitalization in all aspects of contemporary society, the topic of sustainability is becoming increasingly important and increasingly urgent for software engineers and software engineering education. But we have a scant foundation of practices, examples, tools, datasets, guidelines etc. upon which to make principled engineering decisions and upon which to build a curriculum. In spite of the active international research community in the field, we lack a strong foundation of significant and reusable results upon which to build tangible progress that helps contribute to the target sustainability goals.

The goal of BoKSS 2021 is to create such a knowledge base. We seek to create a knowledge base of actionable results that will transform sustainable software engineering practices from a novel research area into a robust, repeatable, teachable practice area within software engineering.

In addition to the knowledge base mentioned above, the envisaged workshop outcomes include forming a concrete work-force that will create (i) an online platform to share the knowledge base, and (ii) a scientific report targeting journal publication which will present the Body of Knowledge for Sustainability in Software Engineering (BoKSS) as a unified theory. Depending on the number of participants and their contributions, we can imagine more than one report resulting from this workshop.

Prospective participants are invited to submit two types of contributions:

- Full papers (max 8 pages) will describe concrete contributions to the BoKSS. They will be structured as follows: — A description of the sustainability problem you address. — A description of the SE solution you propose. — A discussion of how results are measurable (e.g., KPIs). — A presentation of the evidence of contribution to sustainability, ideally including real world experiences. — A discussion of the costs and benefits of your approach. — A presentation of the transferable artifacts you are contributing e.g., replication package, code, examples, documentation, educational materials, case studies.
- Extended abstracts (max 2 pages) will describe a motivating challenge problem that has ideally emerged from practice. They will be structured as follows: — The context. — The challenge problem. — The current solution/s (if present) and their strengths and weaknesses.

Workshop papers must follow the ICSE 2021 Format and Submission Guidelines, but will use a *single blind* submission process. All submitted papers will be reviewed on the basis of technical quality, relevance, significance, and clarity by the program committee.

All workshop papers should be submitted in PDF format via the EasyChair workshop website at <https://easychair.org/conferences/?conf=bokss2021>. Accepted papers will become part of the workshop proceedings.