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Edited by

Catherine E. Nemitz
Bryan C. Ward

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*DARTS Special Issue Editors*

**Catherine E. Nemitz**
Davidson College, Davidson, NC, USA
canemitz@davidson.edu
https://orcid.org/0000-0002-5800-3533

**Bryan C. Ward**
Vanderbilt University, Nashville, TN, USA
bryan.ward@vanderbilt.edu
https://orcid.org/0000-0001-7168-6693

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*Contact*
Schloss Dagstuhl – Leibniz-Zentrum für Informatik
DARTS, Editorial Office
Oktavie-Allee, 66687 Wadern, Germany
publishing@dagstuhl.de

`https://www.dagstuhl.de/darts`

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# Artifact Evaluation Process

The ECRTS Artifact Evaluation (AE) process took place separately from paper acceptance. We sought to achieve the benefits of the AE process without disturbing the current process through which ECRTS has generated high-quality programs in the past. Therefore, the current submission, review, and acceptance procedure were completely unaltered by the decision to run an AE process.

The authors of accepted or shepherded papers were invited to submit an artifact evaluation (or replication) package; artifacts associated with shepherded papers were allowed to be submitted as there was a slight overlap in reviewing timelines. The repeatability evaluation process had no impact on whether a paper was accepted at ECRTS and was entirely optional and up to authors. Moreover, there is no disclosure of the title and authors of papers that did not pass evaluation. This is to avoid negative bias towards submitting artifacts. Once authors who desired to do so submitted their artifacts, an Artifact Evaluation Committee composed mainly of PhD students close to graduation, postdocs, and young researchers evaluated the artifacts.

Artifacts included two components:

- a document explaining how to use the artifact and which of the experiments presented in the paper are repeatable (with reference to specific digits, figures, and tables in the paper), the system requirements and instructions for installing and using the artifact;
- the software and any accompanying data.

Evaluators bid on artifacts based on their ability to meet the system requirements listed by authors. Evaluators were assigned to artifacts on this basis to the extent possible, with the goal of three reviewers per artifact. For any artifacts for which one of the co-chairs had a conflict of interest, the other co-chair managed reviewer assignment, communication, and determination of the final decision. For any artifacts for which both co-chairs had a conflict of interest, the designated Conflicts-of-Interest Chair managed the submission.

During the first week, all the evaluators checked that they could run the code of artifacts assigned to them. In case of problems, these were promptly (and anonymously) reported to the authors of the artifact in order to help fix them. The total evaluation period was two weeks. After the review period, a brief online discussion took place if/when necessary and notifications were sent to authors.

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# Artifact Evaluation Committee

## Conflicts-of-Interest Chair

Matthias Becker
KTH Royal Institute of Technology
Stockholm, Sweden
mabecker@kth.se

## Evaluation Committee

Tanya Amert
Carleton University
Northfield, United States of America
tamert@carleton.edu

Federico Aromolo
Scuola Superiore Sant'Anna
Pisa, Italy
federico.aromolo@santannapisa.it

Anna Friebe
Mälardalen University
Västerås, Sweden
anna.friebe@mdh.se

Arpan Gujarati
University of British Columbia
Vancouver, Canada
arpanbg@cs.ubc.ca

Christian Hakert
TU Dortmund University
Dortmund, Germany
christian.hakert@tu-dortmund.de

Seonyeong Heo
Kyung Hee University
Yongin, South Korea
seonyeong.heo@khu.ac.kr

Sims Osborne
Elon University
Elon, United States of America
sosborne3@elon.edu

Marion Sudvarg
Washington University in St. Louis
St. Louis, United States of America
msudvarg@wustl.edu

Binqi Sun
TU Munich
Munich, Germany
binqi.sun@tum.de

Corey Tessler
University of Nevada Las Vegas
Las Vegas, United States of America
corey.tessler@unlv.edu

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