



Artifact Evaluation

ICSE 2020

About Call for Submissions


Call for Submissions

ICSE'20 Artifact Track: Call for Submissions

Authors of **papers accepted to the 2020 Technical/SEIP/NIER/SEET/SEIS Track** are invited to submit artifacts associated with those papers to the ICSE Artifact Track for evaluation as candidate **reusable, available, replicated or reproduced** artifacts. If those artifact(s) are accepted, they will each receive one (and only one) of the badges below on the front page of the authors' paper and in the proceedings.

Authors of any prior SE work (published at ICSE or elsewhere) are invited to submit an artifact to the ICSE Artifact Track for evaluation as a candidate **replicated or reproduced** artifact. If the artifact is accepted:

- Authors will be invited to give lightning talks on this work at ICSE'20
- We will do our best to work with the IEEE Xplore and ACM Portal administrator to add badges to the electronic versions of the authors' paper(s).

Functional	Reusable	Available	Replicated	Reproduced
No Badge				

Artifacts documented, consistent, complete, exercisable, and include appropriate evidence of verification and validation	Functional + very carefully documented and well-structured to the extent that reuse and repurposing is facilitated. In particular, norms and standards of the research community for artifacts of this type are strictly adhered to.	Functional + placed on a publicly accessible archival repository. A DOI or link to this repository along with a unique identifier for the object is provided.	Available + main results of the paper have been obtained in a subsequent study by a person or team other than the authors, using, in part, artifacts provided by the author.	Available + the main results of the paper have been independently obtained in a subsequent study by a person or team other than the authors, without the use of author-supplied artifacts.
--------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Papers with such badges contain reusable products that other researchers can use to bootstrap their own research. Experience shows that such papers earn increased citations and greater prestige in the research community. Artifacts of interest include (but are not limited to) the following.

- Software, which are implementations of systems or algorithms potentially useful in other studies.

- Data repositories, which are data (e.g., logging data, system traces, survey raw data) that can be used for multiple software engineering approaches.
- Frameworks, which are tools and services illustrating new approaches to software engineering that could be used by other researchers in different contexts.

This list is not exhaustive, so the authors are asked to email the chairs before submitting if their proposed artifact is not on this list.

Evaluation Criteria

The ICSE artifact evaluation track uses a single-blind review process. Artifacts will be evaluated using the criteria in the last row of the above table.

Review will be via Github. All submitting authors must supply a valid Github id that identifies themselves.

The goal of this track is to encourage reusable research products. Hence, no **functional** badges will be awarded.

Best Artifact Awards

There will be two ICSE 2020 Best Artifact Awards to recognize the effort of authors creating and sharing outstanding research artifacts.

Submission and Review

IMPORTANT NOTE: different badges have different submission procedures. See below.

Note that all submissions, reviewing, and notifications for this track will be via the Github repository <http://github.com/researchart/rose6icse> (<http://github.com/researchart/rose6icse>).

- There will be no emails notifying authors, acknowledging a submission, or informing authors of the results of the review process.
 - Instead, submitters can track the progress of their work by tracking its activity in the repo
- Submitting anything to this track will mean
 - Creating a GitHub account with your public name
 - Forking the master branch of our repo <http://github.com/researchart/rose6icse> (<http://github.com/researchart/rose6icse>) into your own local branch
 - Creating a subdirectory one per submission, underneath one of the directories
 - <http://github.com/researchart/rose6icse/submissions/reusable> (<http://github.com/researchart/rose6icse/submissions/reusable>),
 - <http://github.com/researchart/rose6icse/submissions/available> (<http://github.com/researchart/rose6icse/submissions/available>),
 - <http://github.com/researchart/rose6icse/submissions/replicated> (<http://github.com/researchart/rose6icse/submissions/replicated>),
 - <http://github.com/researchart/rose6icse/submissions/reproduced> (<http://github.com/researchart/rose6icse/submissions/reproduced>)
 - Then adding file(s) to that directory,
 - Then committing that branch,
 - Then submitting a pull request back to master.
- All reviewing will be done in Github.
 - Each submission will be processed in its own issue.
- Authors will be notified of final decisions when the track chairs add labels to the submission's issue.

For Replicated and Reproduced Badges

For “replicated” and “reproduced” badges, authors will need to offer appropriate documentation that their artifacts have reached that stage.

By January 27, 2020, create a subdirectory under the directories

<http://github.com/researchart/rose6icse/submissions/replicated>

(<http://github.com/researchart/rose6icse/submissions/replicated>),

<http://github.com/researchart/rose6icse/submissions/reproduced>

(<http://github.com/researchart/rose6icse/submissions/reproduced>) (perhaps followed by a unique number if the same author is submitting multiple artifacts; e.g, menzies1, menzies2) and add a one page (max) abstract in PDF format:

- **TITLE: A (Partial)? (Replication|Reproduction) of XYZ.** Please add the term **partial** to your title if only some of the original work could be replicated/reproduced.
- **WHO:** name the original authors (and paper) and the authors that performed the replication/reproduction. Include contact information (emails) and github ids. Mark one author as the corresponding author.
IMPORTANT: include also a web link to a publically available URL directory containing (a) the original paper (that is being reproduced) and (b) any subsequent paper(s)/documents/reports that do the reproduction.
IMPORTANT: include also a web link to a publically available URL directory containing (a) the original paper (that is being reproduced) and (b) any subsequent paper(s)/documents/reports that do the reproduction.
- **WHAT:** describe the “thing” being replicated/reproduced;
- **WHY:** clearly state why that “thing” is interesting/important;
- **HOW:** say how it was done first;
- **WHERE:** describe the replication/reproduction. If the replication/reproduction was only partial, then explain what parts could be achieved or had to be missed.
- **DISCUSSION:** What aspects of this “thing” made it easier/harder to replicate/reproduce. What are the lessons learned from this work that would enable more replication/reproduction in the future for other kinds of tasks or other kinds of research.

Two PC members will review each abstract, possibly reaching out to the authors of the abstract or original paper. Abstracts will be ranked as follows.

- If PC members do not find sufficient substantive evidence for replication/reproduction, the abstract will be rejected.
- Any abstract that is judged to be unnecessarily critical of prior work will be rejected (*).
- The remaining abstracts will be sorted according to (a) interestingness and (b) correctness.
- The top ranked abstracts will be invited to give lightning talks.

(*) Our goal is to foster a positive environment that supports and rewards researchers for conducting replications and reproductions. To that end, we require that all abstracts and presentations pay due respect to the work they are reproducing/replicating. Criticism of prior work is acceptable only as part of a balanced and substantive discussion of prior accomplishments.

For Reusable and Available Badges

Only authors of papers accepted to the 2020 Technical/SEIP/NIER/SEET/SEIS Track can submit candidate reusable or available artifacts.

Create a subdirectory under the directories <http://github.com/researchart/rose6icse/submissions/available>

(<http://github.com/researchart/rose6icse/submissions/available>),

<http://github.com/researchart/rose6icse/submissions/reusable>

(<http://github.com/researchart/rose6icse/submissions/reusable>) (perhaps followed by a unique number if the same author is submitting multiple artifacts; e.g, menzies1, menzies2).

For the **reusable** and **available** badges, authors must offer “download information” showing how reviewers can access and execute (if appropriate) their artifact.

Authors must perform the following steps to submit an artifact:

- Prepare the artifact
- Make the artifact available
- Document the artifact
- Submit the artifact

Authors need to write and submit documentation explaining how to obtain the artifact package, how to unpack the artifact, how to get started, and how to use the artifacts in sufficient detail. The artifact submission must describe only the technicalities of the artifacts and uses of the artifact that are not already described in the paper. The submission should contain the following documents (in **markdown** plain text format):

- A *CONTACT.md* file listing emails and **github ids** (important) for the authors. Please mark one author as the *corresponding author*.
- A *README.md* main file describing what the artifact does and where it can be obtained (with hidden links and access password if necessary). Also, there should be a clear description of how to reproduce the results presented in the paper.
- A *STATUS.md* file stating what kind of badge(s) the authors are applying for as well as the reasons why the authors believe that the artifact deserves that badge(s).
- A *LICENSE.md* file describing the distribution rights. Note that to score “available” or higher, then that license needs to be some form of open source license.
- An *INSTALL.md* file with installation instructions. These instructions should include notes illustrating a very basic usage example or a method to test the installation. This could be, for instance, information on what output to expect that confirms that the code is installed and working; and that the code is doing something interesting and useful.
- A copy of the accepted paper in pdf format.

For reusable and available badges, the review process will be interactive as follows:

- Prior to reviewing, there may be some interactions to handle set up and install. Before the actual evaluation reviewers will check the integrity of the artifact and look for any possible setup problems that may prevent it from being properly evaluated (e.g., corrupted or missing files, VM won’t start, immediate crashes on the simplest example, etc.). The Evaluation Committee may contact the authors to request clarifications on the basic installation and start-up procedures or to resolve simple installation problems.
- Reviewing will be on Github with reviewers commenting via anonymous Github ids. Authors should not comment until at least two reviewers have added comments. Earlier author comments will be deleted.
- Authors are informed of the outcome and, in case of technical problems, they can help solve them during a brief 48-hour author response period. Authors may update their research artifacts after submission only for changes requested by reviewers in the rebuttal phase.

IMPORTANT DATES

Jan27: Submission deadline

Feb01: Review period (*)


Feb20: Rebuttal period ends.






Feb24: Notifications

Feb25: Send list of artifacts badges to web chairs and proceeding chairs

(*) : For the available and reusable badges, reviewing will be on Github with reviewers commenting via anonymous Github ids. Authors should not comment until at least two reviewers have added comments. Earlier author comments will be deleted.

Important Dates	🌐🕒 AoE (UTC-12h)
Mon 24 Feb 2020 Notifications	
Thu 20 Feb 2020 Rebuttal period ends	
Sat 1 Feb 2020 Review period	
Mon 27 Jan 2020 Submission deadline	

Submission Link
 https://conf.researchr.org/track/icse-2020/icse-2020-Artifact-Evaluation#submission-and-review (https://conf.researchr.org/track/icse-2020/icse-2020-Artifact-Evaluation#submission-and-review)

Program Committees (https://2020.icse-conferences.org/committee/icse-2020-artifact-evaluation-program-committees)		
	Tim Menzies North Carolina State University United States https://2020.icse-conferences.org/profile/timmenzies	Co-chair
	Leandro Minku University of Birmingham, UK https://2020.icse-conferences.org/profile/leandrominku1	Co-chair
	Silvia Abrahão Universitat Politècnica de València Spain https://2020.icse-conferences.org/profile/silviaabrahamo	Programme Committee
	Hamid Bagheri University of Nebraska-Lincoln, USA https://2020.icse-conferences.org/profile/hamidbagheri	Committee Member
	Maria Teresa Baldassarre Department of Computer Science, University of Bari Italy	Committee Member

(<https://2020.icse-conferences.org/profile/mariateresabaldassarre>)



Marcio Barros
UNIRIO

Brazil

Programme Committee

(<https://2020.icse-conferences.org/profile/marciobarros>)



Tanmay Bhowmik
Mississippi State University

Committee Member

(<https://2020.icse-conferences.org/profile/tanmaybhowmik>)



Kelly Blincoe
University of Auckland

New Zealand

Programme Committee

(<https://2020.icse-conferences.org/profile/kellyblincoe>)



George Cabral
Universidade Federal Rural de Pernambuco

Brazil

Committee Member

(<https://2020.icse-conferences.org/profile/georgecabral>)



Tao Chen
Loughborough University

United Kingdom

Committee Member

(<https://2020.icse-conferences.org/profile/taochen>)



Xuan Bach D. Le
The University of Melbourne

Australia

Programme Committee

(<https://2020.icse-conferences.org/profile/xuanbachdle>)



Daniel Alencar Da Costa
Queen's University, Kingston, Ontario

Canada

Programme Committee

(<https://2020.icse-conferences.org/profile/danielalencardacosta>)



Giuseppe Destefanis

Committee Member

(<https://2020.icse-conferences.org/profile/giuseppedestefanis>)



Neil Ernst
University of Victoria

Canada

Committee Member

(<https://2020.icse-conferences.org/profile/neilernst>)



Antonio Filieri
Imperial College London

United Kingdom

Committee Member

(<https://2020.icse-conferences.org/profile/antoniofilieri>)



Regina Hebig
Chalmers University of Technology & University of Gothenburg
Sweden

Programme Committee

(<https://2020.icse-conferences.org/profile/reginahebig>)



Jennifer Horkoff
Chalmers and the University of Gothenburg
Sweden

Committee Member

(<https://2020.icse-conferences.org/profile/jenniferhorkoff>)



Yasutaka Kamei
Kyushu University
Japan

Programme Committee

(<https://2020.icse-conferences.org/profile/yasutakakamei>)



Eric Knauss
Chalmers University of Technology and University of Gothenburg
Sweden

Committee Member

(<https://2020.icse-conferences.org/profile/ericknauss>)



Anne Koziolk
Karlsruhe Institute of Technology
Germany

Programme Committee

(<https://2020.icse-conferences.org/profile/annekoziolk>)



Rahul Krishna
Columbia University, New York

Programme Committee

(<https://2020.icse-conferences.org/profile/rahulkrishna>)



Yepang Liu
Southern University of Science and Technology

Programme Committee

(<https://2020.icse-conferences.org/profile/yepangliu>)



Daniel Mendez
Blekinge Institute of Technology
Sweden

Committee Member

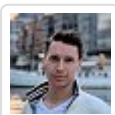
(<https://2020.icse-conferences.org/profile/danielmendez>)



Martin Monperrus
KTH Royal Institute of Technology
Sweden

Committee Member

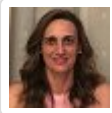
(<https://2020.icse-conferences.org/profile/martinmonperrus>)



Lloyd Montgomery
Universität Hamburg
Germany

Committee Member

(<https://2020.icse-conferences.org/profile/lloydmontgomery>)



Sira Vegas
Universidad Politecnica de Madrid
Spain

Committee Member

(<https://2020.icse-conferences.org/profile/siravegas>)



Andreas Vogelsang
TU Berlin
Germany

Committee Member

(<https://2020.icse-conferences.org/profile/andreasvogelsang>)



Shuai Wang
Hong Kong University of Science and Technology

Committee Member

(<https://2020.icse-conferences.org/profile/shuaiwang1>)



Hironori Washizaki
Waseda University
Japan

Committee Member

(<https://2020.icse-conferences.org/profile/hironoriwashizaki>)



Hongyu Zhang
University of Newcastle, Australia
Australia

Programme Committee

(<https://2020.icse-conferences.org/profile/hongyuzhang>)



Tianyi Zhang
Harvard University
United States

Programme Committee

(<https://2020.icse-conferences.org/profile/tianyizhang>)