## **Evaluation Criteria**

- In brief, the AEC expects that high-quality artifacts will be:
  - o consistent with the paper,
  - o as complete as possible,
  - o documented well, and
  - easy to reuse, facilitating further research.
- Artifacts Available. To earn this badge, the AEC must judge that the artifacts associated with the paper have been made available for retrieval, permanently and publicly. Valid hosting options include institutional repositories and third-party digital repositories that have a declared plan to enable permanent accessibility, e.g., Zenodo, FigShare, Dryad, or Software Heritage. In particular, making the artifacts available solely through personal web pages, GitHub, GitLab, or a similar software-development site is not adequate for receiving this badge. Other than making the artifacts available, this badge does not mandate any further requirements on functionality, correctness, or documentation.
- Artifacts Evaluated. To earn this badge, the AEC must judge that the artifacts conform to the expectations set by the paper in terms of functionality, usability, and relevance. In short, do the artifacts work and are they useful for producing outcomes associated with the paper? The AEC will consider four aspects of the artifacts in particular. (i) Documented: are the artifacts sufficiently documented to enable them to be exercised by readers of the paper? (ii) Consistent: are the artifacts relevant to the paper, and do they contribute in some inherent way to the generation of its main results? (iii) Complete: do the submitted artifacts include all of the key components described in the paper? (iv) Exercisable: do the submitted artifacts include the scripts and data needed to run the experiments described in the paper, and can the software be successfully executed? The Artifacts Evaluated badge has two levels. Artifacts that are judged to satisfy the above criteria will be awarded the Artifacts Evaluated—Functional badge. Artifacts that are judged to significantly exceed the minimum standards for the above criteria, to the point that the artifacts facilitate reuse and repurposing by others, may instead be awarded the Artifacts Evaluated—Reusable badge.
- **Results Reproduced.** To earn this badge, the AEC must judge that they can use the submitted artifacts to obtain the main results presented in the paper. In short, is it possible for the AEC to independently repeat the experiments and obtain results that support the claims made by the paper? The goal of this effort is not to reproduce the results exactly, but instead to generate results independently within an allowed tolerance such that the main claims of the paper are validated.

For your report, you need to include (i) Paper summary (ii) Artifact summary (iii) Your running results (iv) Possible Improvements.

## Artifact Review Computing Resources (From Eric Eide, CCS '24 AEC Chair)

- Chameleon (<u>https://chameleoncloud.org/</u>) is a facility for conducting experiments in computer systems. It provides "bare-metal" access to, and control over, a substantial set of computing, storage, and networking resources. For a summary of Chameleon, see: <u>https://chameleoncloud.readthedocs.io/en/latest/</u>
- CloudLab (https://cloudlab.us/) is a facility for conducting experiments in computer science and computing, particularly experiments related to cloud computing, distributed systems, and networking. CloudLab provides "baremetal" access to, and control over, a substantial set of computing, storage, and networking resources. For a summary of CloudLab, see: https://www.usenix.org/conference/atc19/presentation/duplyakin

Reference: https://www.sigsac.org/ccs/CCS2024/call-for/call-for-artifacts.html