

Status:

#944 A Generative and Mutational Approach for Synthesizing Bug-exposing Test Cases to Guide Compiler Fuzzing

We hereby apply for the *Reusable Badge* in the Artifact Evaluation process. We believe that our artifact deserves the *Reusable Badge* for the following reasons:

Relevance to the Community: COMFUZZ is a fuzzing framework for detecting compiler bugs, which proposed an effective approach to leverage the historical bug-exposing test programs. By applying for the Reusable Badge, we aspire to contribute to the growing pool of reusable artifacts that can accelerate future research endeavors in software testing and other relevant fields.

Documentation and Guidance: Our artifact includes comprehensive documentation that encompasses its module descriptions, intended usage, and instructions on reproducing the results. We have strived to make the documentation clear, concise, and accessible to both experts and novices. This documentation enables users to understand and utilize the artifact effectively, expediting its potential reusability.

Generalizability and Extensibility: The design and implementation of our artifact have focused on ensuring its reusability in different contexts. We have made conscious efforts to avoid limiting our artifact to a specific dataset, platform, or environment. Therefore, we are extremely supportive of others implementing fuzzers based on our framework for testing compilers in other programming languages.

In conclusion, we seek the Reusable Badge for our artifact due to its relevance, generalizability, extensive documentation, and potential to contribute to the research community. We are confident that the artifact fulfills the criteria outlined for the Reusable Badge and will be of utility to other researchers in their work.

Please find attached the necessary artifacts, documentation, and any additional information required for the evaluation process.