

5th Competition on Software Testing



Proc. FASE 2023,

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Dirk Beyer (Competition Chair)

Supported by:



Test Problem

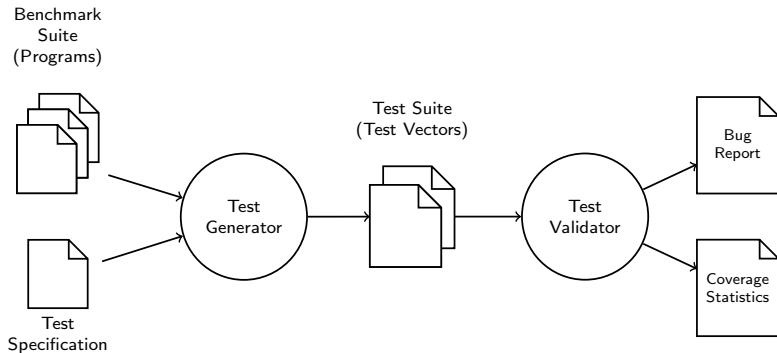
Input:

- ▶ C program → GNU/ANSI C standard
- ▶ Test Specification:
 - Coverage of function call
 - Branch coverage

Output:

- ▶ Test suite

Flow of the Test-Comp execution



Scoring Schema (since 2019)

Common principles: Ranking measure should be

- ▶ easy to understand
- ▶ reproducible
- ▶ computable in isolation for one tool

Test-Comp:

- ▶ Coverage of call to function:
1 point or 0 points
- ▶ Coverage of branches:
TEST-COV coverage value (between 0 and 1)

Fair and Transparent

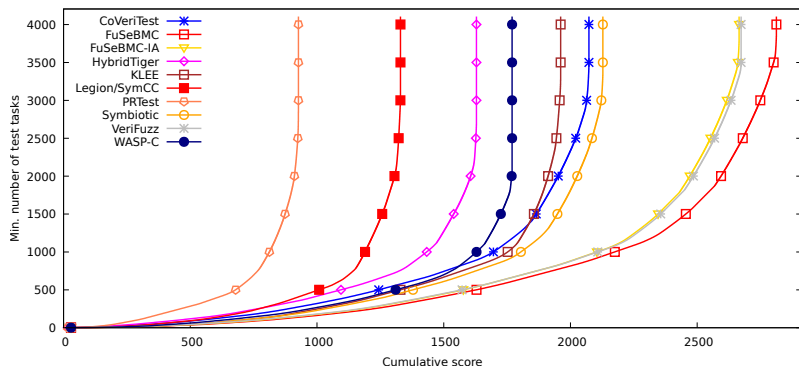
Jury:

- ▶ Team: one member of each participating candidate
- ▶ Term: one year (until next participants are determined)

Systems:

- ▶ All systems are available in open GitLab repo
- ▶ Configurations and Setup in GitLab repository
→ Integrity and reproducibility guaranteed

Results – Example: Overall



Number of Participants

Number of evaluated test generators for each year (top: number of first-time participants; bottom: previous year's participants)

