

Symbiotic 11

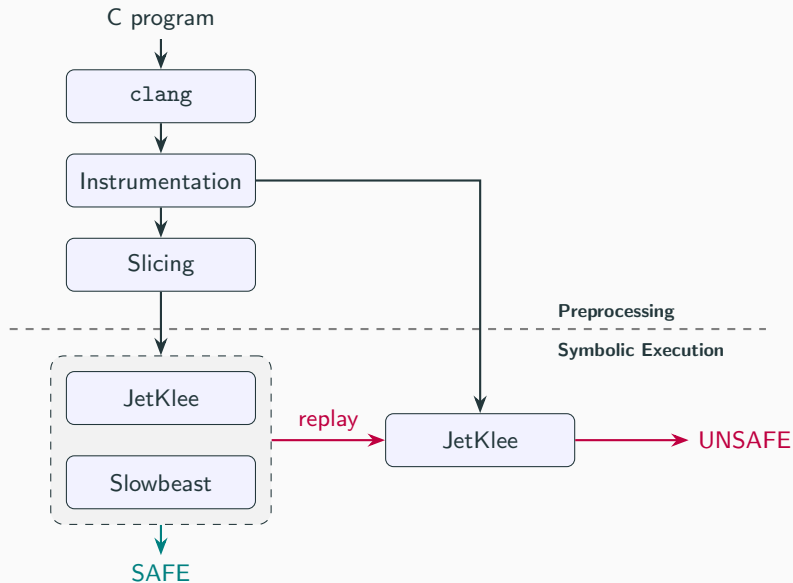
Predicate Abstraction Joins the Party

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Symbiotic Framework



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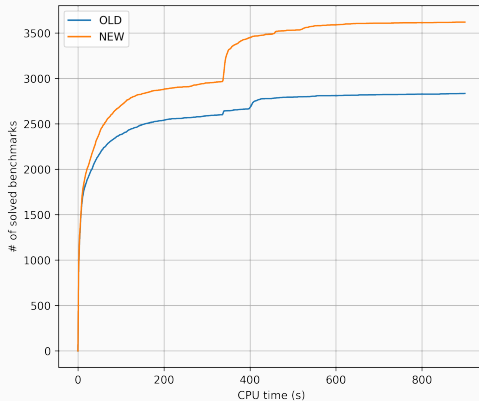
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- Symbolic Execution With Predicate Abstraction in Slowbeast
 - implicit predicate abstraction
 - integrated into CEGAR
 - hundreds of newly-solved benchmarks

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- Bug fixes
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 - improved support via **full liveness-to-safety reduction**
- **Symbolic Execution With Predicate Abstraction** in Slowbeast
 - implicit predicate abstraction
 - integrated into CEGAR
 - hundreds of newly-solved benchmarks
- Updated symbolic executor portfolio (for C.ReachSafety):
 - JetKlee — Symbolic Execution (333 s)
 - **Slowbeast — Symbolic Execution w Predicate Abstraction (120 s)**
 - Slowbeast — Compact Symbolic Execution (60 s)
 - Slowbeast — Backward Symbolic Execution w Loop Folding (120 s)
 - Slowbeast — Symbolic Execution (rest)

Symbolic Execution With Predicate Abstraction — Results



- 3rd in C.ReachSafety
- 1st in C.MemSafety
- 2nd in C.SoftwareSystems
- 3rd in C.Overall
- 1st in C.FalseOverall