

Instrumentation – abstract and symbolic verification

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Motivation for instrumentation

- DIVINE struggles on programs with input
- Prototype SymDIVINE – Control-Explicit Data-Symbolic verification (CEDS)
- We don't want to complicate core of DIVINE
- Enable various abstractions

Modifications to DIVINE

- Instrument verified program to behave like abstracted program
- New verification algorithm
 - Using SMT solver to check states equality
- Algorithm modification is not needed for simpler domains

