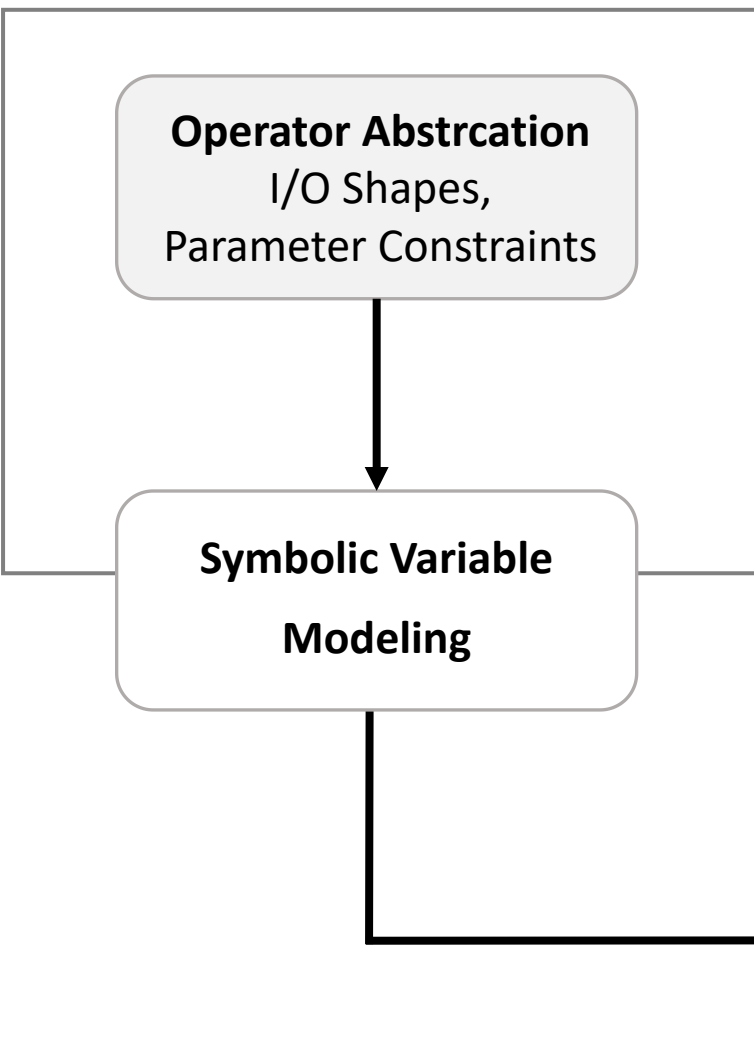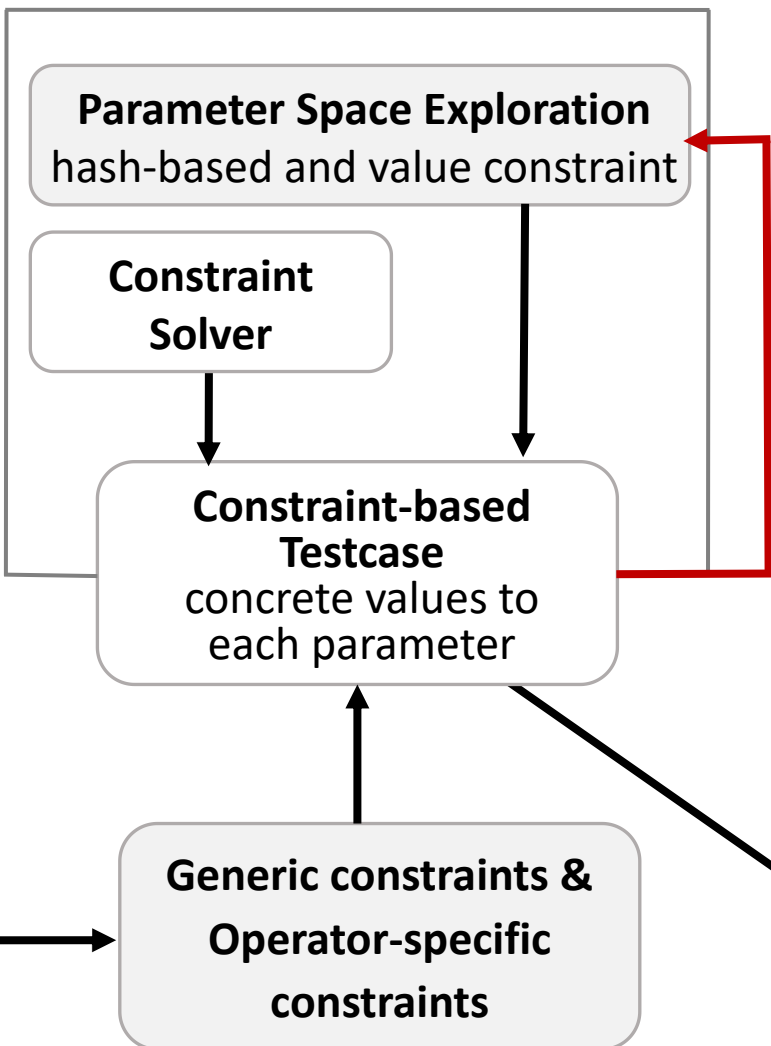# Operator Modeling

Constraint-based Testcase Generation

Cross-Framework Execution

Operator Abstrcation
I/O Shapes,
Parameter Constraints

Parameter Space Exploration
hash-based and value constraint

Runtime Analysis Tool
compute-sanitizer (NVIDIA)
wraps execution

Constraint Solver

Symbolic Variable Modeling

Constraint-based Testcase
concrete values to each parameter

GPU Hardware
Executes Test Case

Monitors

Framework-specific API Calls

Generic constraints & Operator-specific constraints

Execution Controller