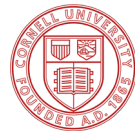


Cross-Language Support for Runtime Verification



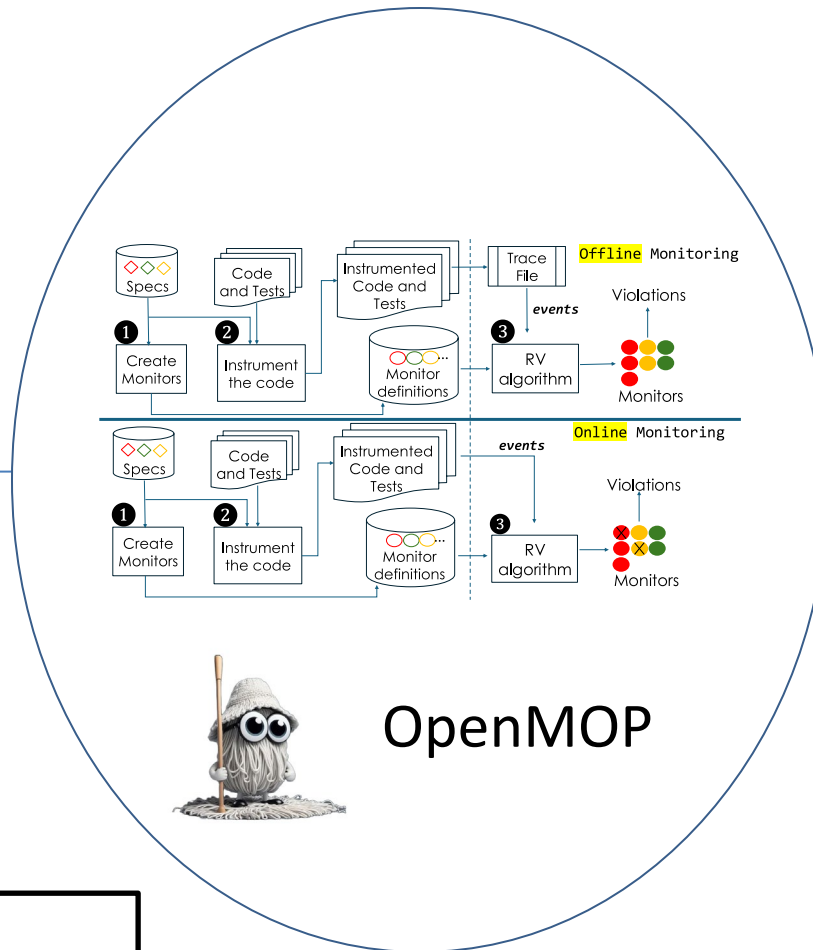
Challenge:

It is difficult for developers to:

- (1) learn specification languages and
- (2) write RV tools for new programming languages (e.g., Python, Go, etc.)

Solution:

- Simplify front ends
- Modularize and reuse back ends



OpenMOP

Scientific Impact:

- Facilitate development of new RV tools

Broader Impact and Broader Participation:

- RV framework for Python (PyMOP). RV for Go: in progress
- 50+ specifications for Python language and libraries
- Reported 13 bugs
- Students involved: 1 PhD student, 1 MS student, and 1 undergrad
- Plan to use material in classes at NC State and Cornell
- PyMOP paper in preparation

Award # 2319472

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