

# Multilingual Software Analysis

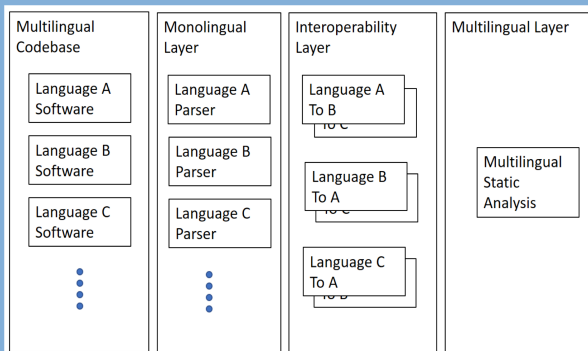
## MLSA Research Group

**Goal: To develop lightweight, open source tools that process multilingual codebases**

## Open Source Multilingual Software Analysis Tool

Use monolingual filters to produce language-Independent files that can be analyzed and compiled into unified common representations such as callgraphs

### MLSA Software Architecture



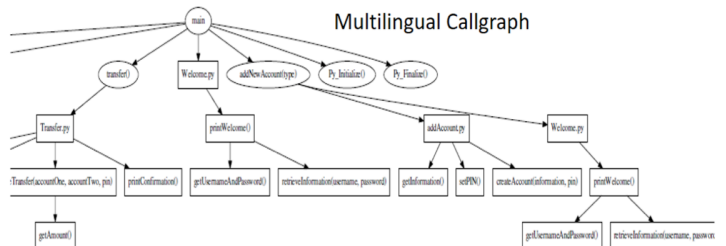
### Python library



### C Codebase calling python



### Multilingual Callgraph



## Challenges of a Multilingual Codebase

- Redundancies in code (two procedures of different languages performing the same function)
- Debugging Complexity (different languages interact with each other in potentially unexpected ways)
- Security Issues (procedures of different languages may be called incorrectly or unsafely)

## How to Become Involved

- Download our repository and test our open source code on your codebases
- We would like to know if you found this useful and/or there is functionality you would like to see added.
- Consider collaborating with us on extending the software and adding new functionalities

## Contact:

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