Student Assistant (m/f/*)

Comparison between SAST-tools with source code vs. binaries as starting point

Motivation and Task Description

Static application security testing (SAST) is a powerful tool to find vulnerabilities. Depending on the exact tool, source code or binaries are required as prerequisites. While binaries can contain more information (e.g. runtime information or information added at compile time, such as class definitions or call graphs), source code contains more easily extractable information such as header information and struct definitions.

Your task will be to research state-of-the-art representatives of SAST-tools of both domains, with a focus on C/C++. Further, your task will be to identify their different requirements and capabilities, and to develop a benchmark for comparison.

Requirements

- Knowledge of different code-representations (AST/IR)
- Basic programming experience (C/C++)
- Ability to work self-directed and systematically
- Experience with LLVM is an asset
- Experience and knowledge in static security testing is an asset

If you are interested and would like to know more, please refer to the persons mentioned below. Please send your application with current CV and transcript of records to:

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