

How to Write a Project Proposal

What is the problem you are addressing?

What is the context?

What is your approach?

How will you evaluate your approach?

Based on your results what future directions will be possible?

~~Approach Outline~~

~~Connection analysis is ...~~

~~We will implement connection analysis in OpenAnalysis.~~

~~Using UseOA-ROSE to connect OpenAnalysis to ROSE, we will analyze a number of C and C++ programs.~~

Approach Outline

Connection analysis is ... (provide a small concrete example)

We will implement connection analysis in OpenAnalysis

- using the ICFG data-flow framework (details, similar to existing managers?)
- whether we can or cannot use existing analysis results data structures (details)

Using UseOA-ROSE to connect OpenAnalysis to ROSE, we will analyze a number of C and C++ programs.

- We will create small programs that exercise/test various aspects of the analysis.
 - which aspects
 - which papers are a source of small examples relevant to connection analysis
- We will analyze the following benchmarks (b1.c, b2.cpp, etc.)

Evaluation

- We will record the reduction in possible locations each memory reference may access.
- We will time the analysis itself and plot the execution time wrt program size.