

Team Objectives, Plans, and Ideas

4th Year Project Team

June 16, 2020

Part I

What is the Project?

As you know, our 4th year project will be based around developing a tool that will automate the process of testing embedded systems.

Now what do I mean by that specifically? Well, the focus as suggested by the prof is that we focus on communication protocols and develop a tester for that.

With this idea, I feel the project can be split into 3 areas, one person researches into what communication protocol we should be testing, one person would look into the type of system and hardware framework this will be based on, and the last person will be developing the program we will test (one person assigned this but we can all contribute to this).

As for the program itself, I wanted to use a technique called concolic execution or another type of testing called fuzzing. Both methods differ from each other and both have their hurdles and if this is too hard, we can rise to the challenge or just bow out and make a straight forward program that takes in test cases and spits out a result (Very boring in my opinion).

Part II

What is the Concolic Testing?

Part III

What is Fuzzing?

Part IV

Our Approach?

Part V

Preparation?