P.U.R.E. Research Plan Form

Mentee Information
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Mentor Information
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Faculty Advisor: Tao Xie________________________

Spring 2018 Research Plan

1) Write a brief outline of your research plan:

Regression testing techniques improves the time it takes developers to get the execution results of its test(s). However, such techniques rely on the tests to be independent. When test independence is not respected, the use of these techniques may produce incorrect test results. The project I am joining analyzes the impact of dependent tests on some regression testing techniques.

My particular role in this project will be to identify test dependencies in open source software and identify ways to fix these dependencies. I will be running scripts on some of the open source software. Since open-source software are frequently updated, I will also study how test dependence is affected by different versions of software. Once I have identified a way to fix the dependencies, I will submit a pull request to the developers of the software to fix the issue of test dependence in open source software.

2) What do you hope to learn and achieve by the end of the semester?

I hope to learn about the nature of regression testing techniques and also the nature of how Computer Science research operates. I am also looking forward to being able to make some contributions to large open-source projects.

Mentee Signature: ____________ Date: __Feb 14 18____
Mentor Signature: ____________ Date: __Feb 14th, 2018____