P.U.R.E. Research Plan Form

Mentee Information

Name: Dhruv Bansal Date: 09/21/2016
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Major: Computer Science

Mentor Information

Name: Mohammad Hosseini Date: 09/21/16
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Faculty Advisor: 

Fall 2016 Research Plan

1.) Write a brief outline of your research plan:

During the semester, I will be working on a mobile application that will involve profiling cellular network coverage in routes between Hoopeston and Champaign. I will primarily be developing an application that will track 3G/4G coverage on a smartphone between the two cities mentioned above. The mobile application will be built for Android, which I have experience with, but I will still need to learn many new programs and concepts in order to build the app. The application, if we have enough time, will also be developed for iOS, which will require more research and will be a good learning experience as well. I will also be researching on new topics, such as real test-bed analysis, that are completely new to me. I will have to learn about them from scratch and then implement them into the mobile application. On top of this, I will have to get familiar with many new algorithms and integrate them into the application. If we are able to finish the application early, we will try to extend the problem and mathematically model the problem for further analysis.

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

I aim to improve my skills with Android Development (or learn new skills for iOS development) and hopefully learn about many new complex Algorithms that I will be able to use in my computer science career. I also hope to develop a passion for working on high-impact real world projects, which I would use to develop other useful applications during my career. I aim to use everything I learn from this research opportunity to develop new complex mobile applications that are also high-impact.

Mentee Signature: Dhruv Bansal Date: 9/21/16
Mentor Signature: Date: Sep. 23, 2016