

**Jerry Lee**  
*Computer Engineering*  
*UROP/SURP*  
*Fall 2018*  
✉ jerrl10@uci.edu

**Unmanned Ground Vehicle**  
*Personal Statement*

November 12, 2018

My name is Jerry Lee and I am a 4th year Computer Engineering Major at the University of California, Irvine. I have chosen to pursue research in developing a unmanned ground vehicle in an effort to create solutions for locating specific targets in certain situations and the green initiative at UC Irvine. Using autonomous software, I believe we could bring many solutions that could be of great benefit to many.

Our goal is to create a system which is small, lightweight, simple to use, can be easily stored, and quickly deployed. I personally want to design and build the software, as well as contribute to the overall design of this device. I believe this device could be of great use in search and rescue missions where something needs to be quickly deployed. Having something small and easy to store, as well as move, is vital to being quickly deployed. This is a solution to waiting for responses of vehicles such as helicopters. It being small, it could reach areas that are difficult to reach. It would save a lot of money on resources as well. I believe this could contribute to help save many lives, thus I want to contribute to this project.

Our other goal is to create a green solution for UC Irvine. Our current idea is to have a moisture sensor monitor moisture levels of certain areas of campus. We would create a schedule for it to sample areas throughout the campus and return results which could indicate water being wasted. This would allow us to acknowledge the unseen problems, which then can be solved. I would want to contribute to this through development of the software and help UC Irvine towards a greener future.

I am also part of several other research projects in Calit2 and my own personal projects. Although I am participating in many other research projects, I do not believe they will hinder my progress in each. Rather, the research conducted for each project may help development of the other projects as many engineering concepts behind each are very similar. Encountering errors in one project could help to avoid the same errors in other projects, as well as finding a solution for one project could reveal solutions in the others.