

Personal Statement

Zhifang Zeng

My name is Zhifang Zeng, a senior student of the Engineering School, EECS Department. Since I was in high school I was hoping to become an engineer, the one who can make some real creations. I like robots and drones, so I joined a drone club since I was a freshman and participated in many drone related projects, like controlling the drone with Kinect. By the time I become a sophomore, I then first learned about computer vision, and I was deeply fascinated by its power. So I started learning it from every source I could found on the Internet, and even participated in a related research when I became a junior student.

And now, with everything I have learnt so far, I have a strong desire to do some real engineering and combine all the knowledge I have to create something new — a system that can actually help the others and make a difference. In addition, the experience of developing a big project like this will also have a very positive influence on my future career, showing that I am a real capable engineer.

The idea of starting this project originates from the project Amazon is currently developing – the drone delivery. Deliver parcels by drones can significantly accelerates the shipment and cuts down the cost on delivery. However, building a drone delivery system will just be too big for us, so we decided to start from something with a smaller scale, one that only needs to handle very few requests at a time, doesn't need to carry something heavy but still can help people a lot, and that came into our Medical Drone Project. The project can help people at their emergencies and doesn't need to devote too much resources on it, the only device we need is an aircraft. However, as we view safety issues significant, instead of building our own cheap drone, we want to purchase one with reliable quality and mature basic flight controls integrated in, which is the DJI product we plan to purchase, so that we can focus on our own project.

In the end me and my group members are devoting great efforts on this project and we really need the funding from UROP to make it succeed.

Personal Statement

Yuting Jiang

I am Yuting Jiang, a senior student from Department of Electrical Engineering and Computer Science, Henry Samueli School of Engineering. I have always been dreaming about creating something interesting and useful and becoming an engineer since I was in high school. I have taken part in many interest groups and projects that include automatic controlling, drones, programming and so on. I joined a drone club when I was a sophomore and participated in many drone related projects, like building our own drones and controllers. When I entered my junior year, I first learned about the theory of automatic controlling, and I was so impressed by the theory behind the 'magic, so I started to apply the theory in every project I participated in that involves controlling. I also participated in a research that involves automatic controlling and took the responsibility of writing the program that controls the whole process.

Although I have experienced some projects like automatic cars, and building a drone, I have never been involved in a project that build an automatic drone. This requires much more precision in controlling and more efforts in testing. I have a very strong desire to combine both of my previous project experiences together and explore deeper into the world of controlling and engineering. I am in a group that have great ideas and initiative. We are working on a system that can actually help others and make a difference. Also, being involved in such a novel project has great positive influence on building my ability of solving problems as an engineer.

The idea of starting this project originates from the project that many major technology company is currently developing – the drone delivery. The project aims to replace traditional parcel delivery methods with drone delivery system to significantly reduce the cost of shipping. However, building a drone delivery system would be hard to fulfill for us in such a short time, so we decided to start from something quite similar but at the meanwhile, quite different. We want to build a system that only needs to handle very few requests at a time, doesn't need to carry heavy things but still can help people a lot, and that came to our Medical Drone Project. The project can help people at their emergencies while consuming little resources. The only device we need is a drone. However, stability is a significant issue for us to consider, instead of building our own cheap drone, we want to purchase one with reliable quality and mature basic flight controls integrate, which is the DJI product we plan to purchase, so that we can focus on our own project.

In the end my group members and I are devoting great efforts on this project and we really need the funding from UROP to make it succeed. Thank you very much for your attention.

Personal Statement

Shiyu Guo

My name is Shiyu Guo, a senior student from Department of Electrical Engineering and Computer Science, Henry Samueli School of Engineering. I'm majored in Electronic Engineering, and I've done several interesting Engineering project before like the smart home project , RoboCup competition and building iOS applications. I think these experience will help us achieve our goals. This time, our team in 159 Senior design class will design a medical delivery drone which can help the disabled to get the medicine by using the mobile phone application.

This idea comes from the drone delivery. In our opinion, the drone can not only deliver the cargos, but also the medicine indoor. Since there are a lot of people who may not able to get the medicine conveniently, we think this project can help them to get the medicine, and may reduce the damage of the disease.

Although I've developed several simple applications before, I've never participant in the project connected with drone and the cloud server before. I think this project will help me to get familiar with drone and cloud server, to put all the knowledge I learned in the class into practice.

I strongly believed that this is a good opportunity to enhance our engineering skills, we are devoting great efforts on this project and we really need the funding from UROP to make it succeed. Thank you very much for your attention.

Personal statement

WeiXi Wang

My name is Weixi Wang, a senior student studying in the EECS department in UCI. I have been dreaming of becoming someone who can design some garget for others to use. Ever since I entered the college, I have chosen many courses related to automatic control theory, electronics, circuit design. All I want is fulfil my dream as a designer as well as an engineer. During my study, I know that I will use what I learned to make my dream come true.

Up till now, what I have learned has had a great impact on what I could do--I can design a complicated system with multi feedback routes as well as a proper gain. I have enough knowledge in designing a multivariant time-variant system, and I believe that could help a lot in design and modify the control of the drone in the project.

The reason why we choose the topic lies in a project Amazon recently released. In the project Amazon's drones help carry parcels to a designated area, cutting down the cost of shipment. We know that we may not be able to create a drone that could carry heavy loads, so we start by making a drone delivery system that can carry light loads while still having some realistic and beneficiary purpose. After discussion, we determined that we should make a drone that can carry medical aids to whoever need it. From an ethical and social level as a whole, we want to help improve the medical related social services of the society.

We are now building the server and UI the system needs, and all we need is a trustworthy and reliable drone—the reason we choose to buy one instead of building one is that we want to make sure we don't cause any safety issues.

In the end me and my group members are devoting great efforts on this project and we really need the funding from UROP to make it succeed.