Everyone has had a great image editing idea at some point that they did not have the skills to actually execute. But what if it was possible to make custom images without all the difficulties that come with learning how to use Photoshop? That is where my team’s project comes into the equation. Without our project, we will take artificial intelligence (AI) principles to create a user-friendly application for creating custom images that can be used as wallpapers or posters. The application will allow users to enter a prompt for the image that they are looking for. They will be able to create custom objects using images that they upload to train the AI model, and these objects can be used in a prompt given by the user. To achieve this, we will use our collective individual experiences from classes and co-ops.

I have taken a variety of courses during my time at UC. My first true experience with modern AI tools, like ChatGPT, was in CS 4033: AI Principles and Applications. I learned more about all these tools and how they were applying certain AI principles which will help me understand what we need to research for this project. I can use the testing knowledge and skills that I have gained from EECE 5132: Software Testing and Quality Assurance to thoroughly and efficiently test the application that we build. CS 5167: User Interface I taught me how to think about the user and to account for human error in a design. All of these courses combined with the knowledge from my co-ops will allow me to contribute my individual skills to this project.

During my four co-op rotations with three different employers, I have worked on a variety of software quality assurance testing projects for mobile and automotive applications, as well as advanced algorithm analysis. I can use my knowledge from being a Software Quality Assurance Engineering Co-op at Moen Incorporated to set up a testing framework for the application we build for our project. I learned how to think like a consumer, so I can make sure that the app is usable for a variety of people. I also have experience with researching and using pieces of new technology from analyzing software tools as an Infotainment Product Development Intern at BMW of North America. My time as a Software Engineer Intern at L3Harris Technologies allowed me to understand how AI models can be trained to recognize all kinds of information. These roles have benefited me even more than I could have ever expected during college.

If I had been asked in my first year of college about where I thought I would be my senior year, I could not have imagined all of the knowledge – both technical and professional – that I have gained in the past four years. This has helped me contribute to the formation of my team’s project for Senior Design. Artificial intelligence has become increasingly relevant to everything done in computer science as my college career has progressed, and it has been discussed in my classes and co-ops. Even before my senior year, I knew that I wanted to build some sort of mobile app. Each member of my team has individual skills that the team as a whole can combine to build and test a successful project. When we first started, we just brainstormed. We discussed each idea thoroughly and decided on which one we thought would be the most possible for us.

I am very excited to work on this project and work with this team. We are still getting to know each other in a more professional way, so we have been meeting a lot. We plan to maintain a lot of communication about every step of our project and meet regularly to hold each other accountable for getting work done. We will evaluate our progress by setting deadlines for project tasks and meeting them on time. We will use the help of our faculty advisor to stay on track and improve accountability. Though it is still early in the year, I am ready to see how our project develops and excited to share it when we are done.