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My team's senior design project is to make a web application for neural networks. This application. This application will allow users to train and test their neural networks. We will be using Pytorch as the base for this project. The front end will be created using Svelte. This means this project will have various requirements ranging from creating the backend end along with a usable frontend.

My college education so far has made me more suited towards working on the front end rather than the backend. I have taken Intro to Web Development and am currently taking User Interface Design. I am required to use Svelte in User Interface Design which will help me in working on the front end for this project. I am also currently taking Natural Language Processing which covers some machine learning topics in it. This will aid my understanding of the backend of the project. I think these classes give me a good base to work on this project.

I completed all of the co-op terms working at Siemens on their NX Cad application as a Software Engineer. I specifically worked on the Routing Application, a specific toolset within NX designed for routing electrical components and mechanical components like HVAC and pipes. When working on projects, I designed solutions with supporting project documentation such as Functional Specifications, Design Specifications and testing strategies. I did not work on anything that is directly relevant to the topic of this project, but I should have transferable experience from working on other types of projects. The types of projects I worked on were feature enhancements or the addition of new features in the product. I also used python sometimes during my co-ops so I have some experience there.

This application will be designed to facilitate the creation and testing of neural networks. The user will be able to create their network from the ground up. One measure of success would be if someone not involved in the creation of the project would be able to successfully use the application to create a neural network. Another measure of success would be if the designed neural network is competently able to complete the task it was created for. The application should also support a variety of different input types of data, such as images, JSON, and CSV. We will have to decide on a minimal set of base features we want in the project, as there is a plethora of potential features we could add.

I am excited to work on this project because AI has been a hot field lately. I think it is a valuable topic to learn about and gain experience in. It is also different from any other projects I have worked on so I think it will be an exciting project to work on. I will evaluate my contributions by looking at what our implementation goals are and comparing the work completed to what we wanted to complete. My group members will help to evaluate our work individually as well as overall. If the group has decided that we have hit all of our benchmarks and milestones, we can say we have done a good job on the project.