Senior Project Proposal

* What are you going to create?
  + I hope to build a web application that implements a machine learning model to perform action recognition on videos of recipes and then takes that data and creates a printable form recipe. My primary focus is on creating a nice web app, I want it to be polished and have customizable features such as giving users the ability to upload pictures to their recipe, change fonts, colors, etc…
* What technologies are you going to use?
  + I need to research further the source of my model, but currently I am learning about PyTorch (specifically PyTorchVideo) and TensorFlow. I’m not sure about which avenue to pursue and could use council on this as I’m not familiar with machine learning. I’ve also been researching methods to do action recognition with image classification models which are offered by both platforms.
  + For my client-side, I want to use React, a JavaScript framework for developing web applications. I chose React because the internship I’ll be having a follow up interview for in November uses React and I figure this would be a great way to familiarize myself with the platform.
  + For server-side, I’ll use Express Node.js for http handling, and since PyTorch and TensorFlow are both optimized for Python, I’ll probably have to create an API of some sort with Python. But I’ve seen there are ways to use both with Java, which would be my preference if this is possible.
* What do you hope to learn?
  + Mainly, I hope to learn React. I want to use the technologies my future employers use. I am also highly interested in machine learning and I think getting to implement a model would be really cool.