For this Project, I decided to implement Convolutional Neural Network. I first Met with the topic in the Machine Learning class last Spring. I didn't have the opportunity to test the model in more detail. So, after getting the opportunity of implementing an AI algorithm, I instantly chose that subject. The thing that most attracted me is the overfitting. The subject seems interesting and, at the same time, daunting to me. It's fascinating how validation accuracy is at the center of the whole model and how it dictates the performance of the model.

To understand it more deeply, I studied how to prevent it, and then I came across the Dropout idea. I wanted to implement it, and this project gave me the perfect opportunity. Here, in this project, I tried to do something simple. Fashion MNIST is a dataset I am familiar with and have in-depth ideas. So, for this project, I tried to implement a CNN model on the dataset. And, then I implanted some dropout features, which decrease the validation loss and, at the same time, increase the opportunity. The dataset can be found here.