Data Science Project Recap

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Part 1: Improving the Classification Project

In the first Part of this project we were asked to improve our classification folder from the past semester, implementing things learned this semester. I used a model called XGBoost which improved my accuracy score by 3%. I also tried to improve that by removing features that were less important but lowered the accuracy by just a bit.

Part 2: Fashion-MNIST Dataset

In this project the goal was to build a classifying model for the Fashion-MNIST dataset. Using PCA I was able to decrease the number of dimensions to 187 which allows the model to be a lot simpler and more efficient. I decided to use a new model learned this semester, XGBoost. The total accuracy score is 88%.

Part 3: Cats-vs-Dogs Dataset

In this project my goal was to build a classifying model for the Cats-vs-Dogs dataset. Using PCA I was able to decrease the number of dimensions to 80 which allows the model to be a lot simpler and more efficient. I decided to use a new model learned this semester, XGBoost. The total accuracy score is 63%

Part 4: Hand Positioning Dataset

In this project the goal was to classify different hand positions. After cleaning the data and loading it properly, I ran models like Knn, Logistic Regression, Forest Regression, Naïve Bayes, Bagging, Voting, and XGBoost. I split the testing data into training and testing set in order to determine what the best model is.