

Alec Tutino

CS132 Capstone Abstract

### **Videoslide Abstract**

For my capstone project, I implemented a video service in a group that uses machine learning in order to automatically stream videos to its users based on their preferences. The overall concept of the project was to provide a Pandora-like service for Youtube videos; a user enters a query, and the service constantly streams videos it believes to be related to the query. While watching a video, users are given the option to upvote, downvote, skip, or go back a video. The machine learning part of our project uses a users' upvotes and downvotes to predict what other videos a person would like based on the Youtube flags of the video. For example, if a user searches for "puppies", and tends to upvote Labrador puppies and downvote chihuahuas, then future videos will tend to feature more Labradors and fewer chihuahuas.

My role in the project was mostly the Javascript interface between the backend machine learning and server with the frontend HTML/CSS. One of the major goals in our design was to keep the interface as simple as possible so that users needed to make very few actions and still get good results. As such, after logging in, all of the website can be controlled using only the keyboard to search, vote, skip, and rewatch videos. The next video to be shown automatically loads and plays after the current one is finished, so there is no need for repeated searching or clicking to continue the entertainment.