[ECS 175] Report

Group 8

12/07/2020

Introduction (1 page)

Overview

The project aims to use supervised learning techniques to build a Machine Learning model that predicts the "virality", which is defined as a view count, of a video. Predicting whether the video is trending or non-trending is a binary classification problem; thus, we implemented Neural Network and Logistic Regression model, compared the performance of the two models, and chose the best model in order to classify the video given some data about it. Besides Machine Learning model, we developed a web application to show how the model works.

Group Members

Data Gathering Sub-Group:

- **Contribution:** Wrote and manage script to get data from Youtube Data API
- **Members:** Ted Kahl, Rohail Asad

Data Processing Sub-Group:

- **Contribution:** Processed data from API into effective dataset
- **Members:** Phalgun Krishna, Prajwal Singh, Seth Damany

Machine Learning Sub-Group:

- **Contribution:** Created and optimized ML models
- **Members:** Cameron Yuen, Owen Gao, Theresa Nowack, Trevor Carpenter

Documentation and Web App Sub-Group:

- **Contribution:** Created web app and managed documentation
- **Members:** Josh McGinnis, Keith Choung, Nikhil Razdan, Thu Vo

Group Leader:

- **Contribution:** Organized milestones and facilitated communication
- **Members:** Nikhil Razdan

Literature Review (1 page)

Dataset Description (0.5 pages)

Proposed solution and experimental results (4-5 pages)

Conclusion and discussion (0.5 pages)

Reference (unlimited pages)