David E. Nieves-Acaron

Professor Ryan White

MTH 5320

11/4/2021

Project #2 Proposal

**Tentative Project Title**: Characterising YouTube Video Virality and Thumbnail Features Using Convolutional Neural Networks

**Goals of Project**:

1. Creating a Convolutional Neural Network that can determine important features in a thumbnail
2. Determining what are some of the greatest visual indicators that a video will go viral
3. Combine a subset of the inputs used last time to predict the view count once again, and see if this improves results

**Intended Data Source**:

* YouTube Video Thumbnails from gaming channels (will be collected in the same way as last project’s effort)
* The actual feature labelling will have to be a human process of labelling, so some research into dedicated data labelling software is in order.

Tentative feature outputs:

* text
* anime/cartoon
* minecraft
* red arrow/red circle (notorious for its usage)
* human face
* money (usually dollars, can also include cryptocurrencies)
* guns