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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
- game character
  - could be made into a limited set of one hot vectors
- movie character
  - could also be made into a limited set of one-hot vectors
- celebrities (politicians, youtubers themselves, etc...)
- pixelated parts of the thumbnail (can imply nudity but is often used as a bait and switch to lure viewers in)
- red arrow (notorious for its usage)
- human face
- red circle
- money (usually dollars, can also include cryptocurrencies)
- shocked expression
- sad expression
- angry expression
- happy expression

- guns
- blood
- animals