Project title: Robo-Bob-Ross

Team members:

Yessica Haircut

Captain Sham

Mattathias Medicalschool

Overview paragraph:

In our project we will use generative adversarial networks to imitate the paintings of artist and television personality Bob Ross. Using video data from his television program, we will extract and register segments showing the actual paintings as they are created. We will also use recurrent neural networks to build a model for his speech patterns. Together, these models will allow us to create an automated version of Bob Ross that can generate an infinite number of paintings with accompanying dialog (which we term Robo-Bob--Ross). While this application is whimsical, this work has application in adaptive education where there is value in generating new visual, written, and spoken content that is individualized to each learner’s needs. Being able to generate new content if and when it is needed has the potential to transform education.

Deliverables:

Visual GAN for painting generator

RNN for modeling speech given painting content

Output from generative model

Curated data set

Report summarizing results, lessons learned, and directions for future research