Final Project Proposal

Definitions

Team name: *Dancing Queen*

Team members: *Jason Senthil, Neev Parikh, Nimish Garg, Ryan Greenblatt*
Note: Once one person uploads the report to Gradescope, please add all other team members to the submission within the Gradescope interface (top right on your submission).

Project

- What is your project idea?
  Our project idea is to implement and possibly extend the work done in the paper *Everybody Dance Now* (2018, Chan et. al.)

- What data will you use?
  We will record our own video sources as data.

- What software/hardware will you use?
  We will likely write this in Pytorch and will use GPU compute for this project.

- What are the skills of the team members? Who will do what?
  Ryan has the most familiarity with the framework and the research paper. Neev, Nimish and Jason will spend a few days on background reading for this paper. The current idea is that we will split up and work on different parts of the pipeline (data, GAN, pose estimation etc.) and will switch places so that everyone gets exposed to all the working parts.

- How will you know whether you have made progress? What will you measure?
  We plan on replicating the results of the paper and will use their metrics to measure performance.

- What problems do you foresee or have?
  We forsee problems in tuning the GANs and getting the hyperparameters right.

- Is there anything that we can do to help? E.G., resources, equipment.
  We would love it if we could get access to the Brown CS Grid computing cluster for this project.

- 2 pages max; feel free to include any media, references, etc.
  Link to paper: https://arxiv.org/abs/1808.07371