Problem statement

Wednesday, May 15, 2019 9:51 AM

- Goals
  - Learn more about raspberry pi projects, python, and facial recognition
  - Experience working with raspberry pi's and python for these tasks
  - Get an A
  - Have an impressive project that I can show to employers
  - Have a system that can detect faces and recognize faces from a video feed running on the raspberry pi
  - Make a clean and well-documented project
- Boundaries
  - Must be able to run on the raspberry pi
  - Detect and recognize faces in a live video feed
- Success criteria
  - Got an A
  - System is capable of running on raspberry pi
  - System is capable of detecting faces in frame and of recognizing multiple different faces
- Constraints
  - Knowledge of the raspberry pi system
  - Knowledge of facial recognition systems
  - Knowledge of python
  - Time until the class is over
  - Must run on the raspberry pi hardware
- Assumptions
  - Other classmates will work on similar projects
  - I can get all of the needed parts in time
  - Libraries will work properly with my system
- Stakeholders
  - Me
  - Professor
  - Employers
- Timeline
  - Week 1
    - Setup the pi
    - Get opencv and python working on pi
  - Week 2
    - Setup the camera
    - Start facial detection
  - Week 3
    - Finish Face detection
  - Week 4
    - Data gathering
  - Week 5
    - Train recognizer
  - Week 6
    - Implement facial recognition

- Problem statement

- I want to build a system that runs on the raspberry pi that can detect and recognize faces from a live video feed, over the course of this 6 week class.