### Sign Language to English (SLATE8)

## Slate8

### Progress Presentation #2

Team Members: Nathan Kebe El

Tuesday, February 20, 2018

### Milestone Summary

| Jan | 1<br>2 |   |        | Presentation on Existing Image recognition!  |
|-----|--------|---|--------|--|
|     | 3      |   |        | recognition:   |
|     | 4      | Review literture on image recognition                       | Nathan |  |
| Feb | 1      | Review literture on image recognition                       | Nathan | Presentation on<br>learned sign<br>language<br>symbols and<br>cellphone<br>generated<br>images |
|     | 2      | Learn some basic sign language symbols for image generation | Nathan |  |
|     | 3      | Learn some basic sign language symbols for image generation | Nathan |  |
|     | 4      | Generate images with cell phone                             | Nathan |  |

### **Activity Summary**

#### **HIGHLIGHTS:**

- Obtained training video of proven sign language hand gesture recognition and software setup.
- Obtained python software files containing trained hand symbols to the HMM database.
- Installed MS Visual Studio 2017, for python platform.

### **LOWLIGHTS**

- Make contact with python coders to help install and run sign language files.
- Could not setup and system and test for signal syllable recognition.

02/20/2018

### Risk Management

| Rank | Risk  | Mitigation<br>Approach |
|------|---|------------------------|
| 1    | If fail with first project, will research second proven python implementation of sign language software as backup to first. | R                      |
| 2    | Second setup will be given top priority while troubleshooting first project.  | w                      |
| 3    | If both alternative fails, then train hand gesture sign images with the HMM library and cameras which is a longer process.  | R<br>W                 |

02/20/2018

Sign Language Recognition with HMM's.

# Planned Activity for Next Period

- Presentation demonstration on single syllable demonstration with computer and python software.
- Train python system to recognize whole word recognition instead of single syllables.

#### BOY



Open and close the "and" handshape at your forehead

#### GIRL



Make a "thumbs up" and brush your thumb down the side of your chin

#### WHAT



#### WHEN



Circle index finger around other index finger