EE / CPRE / SE 491
Sheet Vision
Week 2 Report

2/8/19 - 2/15/19
Student suggested
Faculty advisor: Alexander Stoytchev

Team Members:

Bryan Fung — Frontend/Backend, Meeting Facilitator
Garrett Greenfield — Front end, Team Scribe
Ricardo Faure — Frontend/Backend, Meeting Facilitator
Trevin Nance — Machine vision, Chief Engineer Power System
Walter Svenddal — Machine vision, Report Manager

Past Week Accomplishments:

- Set up react native environment (Ricardo, Bryan, Garrett)
    - Set up and explored the possibilities and functionalities of react native for our project.
    - Learned Python is compatible and can be used for communication between the front and back end of the system.
- Learned Opencv.js (Trevin)
    - Worked with OpenCV for Javascript to see if Javascript would be an effective language to use for our machine vision programming. Due to lack of online resources, we will be pursuing other options, mainly OpenCV for Python.
- Resource collection and Opencv (Walter)
    - Familiarized with OpenCV calls and methods
    - Searched online to find resources to be obtained to use for the rest of the project

Pending issues:

- React-native for desktop applications requires windows operating system.
- React-native requires many dependencies.
- Very little online resources for OpenCV for Javascript.

Individual Contributions

Team Member	Individual Contributions	Hours this week	Total Hours
Bryan Fung	Set up react native environment	6	8
Garrett Greenfield	Set up react native environment. Explored camera implementation	5	6
Ricardo Faure	Set up react native environment. Research windows implementation.	4	6
Trevin Nance	Tested OpenCV JS to see if it would be practical to write our machine vision in Javascript	5	10
Walter Svenddal	Explored the various ways that we could implement the communication between machine vision and the react native frontend	4	8

Plans for Coming Week:

- Whole Team:
    - Create a detailed schedule for our upcoming sprint goals and end of semester goals.
    - Discuss and explore different possible languages for communication between the front and back end.
- Bryan Fung:
    - Understanding how react native works.
    - Create a hello world desktop program.
- Garrett Greenfield:
    - Create a semester plan of when we will reach certain points of development.
    - Understanding how react native works.
- Ricardo Faure:
    - Create hello world desktop program.
    - Test the usability of python in our react native application.
- Trevin Nance:
    - Work on planning out the development for the machine vision.
    - Work on learning OpenCV for python to be an alternative for Javascript.

    - Come up with a list of priorities for front end objectives.
- Walter Svenddal:
    - Attain printed copies of at least 5 different very simple songs as sheet music.
    - Spend at least 2 hours with Trevin working on developing machine vision algorithms to figure out realistic goals.
    - Create schedule of goalposts for the rest of the semester.