EEE 193B / CpE 191

Group 3S   Weekly Progress Report   Date: 9/26/16

Team Members:

- Thomas Bock
- Ammar Ahmed
- Tan Hua
- Jan Michael Golez

.

Group Meeting Minutes:

- Devise a Work Breakdown Structure to determine which individual is in charge of each part
- Construct a timeline to ensure a date is determined for the construction of each part
- Both hardware and software parts are determined and purchase for further additional enhancements on the CNC laser Machine

EEE 193B / CpE 191

Group 3S   **Weekly Progress Report**   Date: 9/26/16

Summary of Team Tasks Assigned:

1. Housing/Ventilation System
   a. Examine Parts Needed for Ventilation System(e.g. cost of materials)
2. Stand Alone Management System(*S.A.M.S.)*
   a. Research on RasPi3 capabilites with system interfacing with OpenCV through Python
   b. Observe and Understand Octopi Software, helpful for design of CNC Laser Machine
3. Solitary Software System
   a. Research the necessary software package that can be read in RasPi3
   b. Understand how to connect a bridge between the software with the automated camera aspect.
4. Automated/Enhance Camera System
   a. Begin Researching on OpenCV-Python
   b. Research on different microcontrollers that is compatible with OpenCV-Python

Summary of Team Accomplishments:

1. Housing/Ventilation System
   a) Parts have been examine, a group consent is required to further proceed with the materials
2. Stand Alone Management System
   a) Compatibility of RasPi 3 with Python-Open CV confirmed through research
   b) Software Program OctoPi provided detailing Program of CNC Laser Machine
3. Solitary Software Program
   a) Python found most compatible between software, management system, and camera system
   b) Begin Transcripting the language into Python
4. Automation/Enhance Camera System
   a) Research on OpenCV-Python and installation of the software and libraries needed
   b) Raspberry Pi3 was found to be the most compatible for making a connection between camera system and management system

Tasks Assigned for Next reporting period:

1. Housing/Ventilation System
   a) Proceed discussion with parts and began redesigning enclosure/ventilation system
   b)
2. Stand Alone Management System
   a) Collaborate with Ammar to begin communication between camera system and RasPi3
   b) Continue doing research on OctoPi
3. Solitary Software Program
   a) Continue to transcript language into Python
   b) Help with bridging management sytem, Camera, and Software
4. Automation/Enhance Camera System
   a) Purchase RasPi3

Group 3S   Weekly Progress Report   Date: 9/26/16

      b) Install OpenCV-Python in RasPi3

<u>Issues:</u>

   1. No Issues

EEE 193B / CpE 191

Group 3S   Weekly Progress Report   Date: 9/26/16

Individual Summary (cont.)

Name: Thomas Bock

Tasks Assigned for this reporting period:

1. Examine Parts Needed for Ventilation System(e.g. cost of materials)

Accomplishments this reporting period:
1. Parts Examined for enhancement of Prototype CNC Machine

Issues:
1. None

Tasks Assigned for Next reporting period:
         1. First Draft Design of Ventilation/Enclosure

EEE 193B / CpE 191

Group 3S   Weekly Progress Report   Date: 9/26/16

Individual Summary (cont.)

Name: Jan Michael Golez

Tasks Assigned for this reporting period:
1. Begin researching RasPi capabilities with system interfacing
2. Observe OctoPi software to have a better understanding of CNC Laser Machine

Accomplishments this reporting period:
1. Began research on Operating Systems Interacting with both the software and camera
2. OctoPi gave a better layout of CNC Laser Machine through the use of RasPi3

Issues:
1. None

Tasks Assigned for Next reporting period:
1. Begin collaboration with Ammar to ensure that the Camera System communicates properly with Open CV-Python
2. Get more familiar with OctoPi to better enhance the communication between software and management system

EEE 193B / CpE 191

Group 3S   Weekly Progress Report   Date: 9/26/16

Individual Summary (cont.)

Name: Tan Hua

Tasks Assigned for this reporting period:
1. Research the necessary software package that can be read in RasPi3
2. Understand how to connect a bridge between the software and the automated camera aspect.

Accomplishments this reporting period:
1. Python found most compatible between software, management system, and camera system
2. Begin Transcripting the language into Python

Issues:
1. None

Tasks Assigned for Next reporting period:
1. Continue to transcript language into Python
2. Help with bridging Management System, Camera, and Software

EEE 193B / CpE 191

Group 3S   Weekly Progress Report   Date: 9/26/16

Individual Summary (cont.)

Name: Ammar Ahmed

Tasks Assigned for this reporting period:
1. Begin Researching on OpenCV that use Python
2. Research on different microcontrollers compatibility with OpenCV in Python

Accomplishments this reporting period:
1. Research on OpenCV-Python and installation of the software and libraries needed
2. RaspberryPi3 was found to be the most compatible with OpenCV-Python

Issues:
1. None

Tasks Assigned for Next reporting period:
1. Purchase a RasPi3
2. Install OpenCV-Python in RasPi3