# Weekly Status Report 6

### **Quadcopter Cameraman**

sdmay19-42 February 27- March 5

Aamid Ahbab (Lead Engineer) & Client Zhengdao Wang (Team Advisor) Alex Nicklaus (Lead Test Engineer) Isaac Holtkamp (Web Manager) Nate Allen (Report Manager) Luke Rohl (Meeting Facilitator)

#### This week's accomplishments

### Summary

- Alex
  - o Tested PWM pins on Pi
  - o Tested complete hardware loop from pi to motor
  - o Saw some success with communication but there are problems that need to be fixed
- Nate
  - o Collected data to create a function for pixels to dimensions
  - o Derived the function
  - o Encoded an image into a string to send over socket in python
  - o Wrote java to decode image string
  - o Worked with Alex to try and figure out pwm with GPIO pins
  - o Researched other software pwm libraries
- Luke
  - o Complete multithreaded python socket server
  - o Convert Multithreaded Queue into priority Queue
  - o Integrated with Android App
  - o Successfully integrated with BTC
- Isaac

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## Planned to accomplish next week

- Nate
  - o Receive commands from App for mask config
  - Send image over socket to app
- Luke

- o Figure out how to delimit separate messages when messages come in too fast
- o Integrate with CVC
- Alex
  - o Get signal to come out of the flight controller output pins
- Isaac
- Aamid

#### **Roadblocks**

- Problem with number of GPIO pins on Pi we can only do PWM using a software implementation which we are still attempting to integrate
- Problem with getting motors to spin up on tests despite supplying what we believed to be the correct signals to the flight controller
  - We saw some minor responses but it was a minor success if a success at all

#### **Hours Spend**

Team member	Hours This Week	Hours Total
Nate Allen	4	33
Alex Nicklaus	6	37
Luke Rohl	11	37
Mir Ahbab		
Isaac	6	28