

Dissertation Weekly Report

March 27, 2015

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Thesis: *Visual-Inertial based autonomous navigation of an Unmanned Aerial Vehicle in GPS-Denied environments*

1 Accomplishments

- Video processing
 - Vanishing point detection in a video feed was improved and is almost completed.
 - An improvement to the edge detection threshold is being considered: using a dynamic thresholding value instead of a static one.
 - Video stabilization methods are almost completed.
 - The Parrot A.R Drone was acquired.

2 Difficulties

- Video stabilization is requiring too much processing power and may affect future features of the project.
- The Parrot A.R Drone only came with one battery and with no battery charger.

3 Notes

- A meeting with the supervisor was scheduled for the 1st of April at 14:00 PM.