CprE 492 - sdmay20-13

Detection and classification of cracks on transportation infrastructure using UAV based aerial imagery

April 3rd - April 16th

Team Members

- Ian Seal - Reporting Lead
- Lauren Arner - Project Manager
- Madi Jacobson - Data Lead
- Ben Ferreira - Testing Lead
- John Schnoebelen - Software Developer
- Jack Temple - Software Developer

Past Week Accomplishments

- UI Development - John and Ben
    - Tested functionality of UI for flaws/non-intuitive use-cases.
    - Re-analyzed project goals and deliverables to fit new expectations with regards to the user interface.
- Data Analysis - Lauren and Madi
    - Worked on finishing data analyzation
    - Revalidated human identified cracks in control images
- Software Development - Jack and Ian
    - Successfully scraped metadata from the drone pictures and output data into CSV
    - Ability to run multiple images at once.
    - Crack Reporting - Ian
        - Function created to record the percent of the image detected as cracks

Pending issues (If applicable: Were there any unexpected complications? Please elaborate.)

Individual Contributions

Team Member	Individual Contributions	Hours this sprint	Total Hours
Ben Ferreira	Re-analyzed project goals and deliverables to fit new expectations with regards to the user interface.	3	29
John Schnoebelen	Tested functionality of UI for flaws/non-intuitive use-cases	2	27
Lauren Arner	Final Data Processing Final Report/Presentation/Poster Peer Review Submission	4	31
Madison Jacobsen	Finalizing image data Final Report/Presentation/Poster	3	26
Ian Seal	Created function to report the percent of the image detected as cracks	4	31
Jack Temple	Scraped metadata from DJI drone captured images Added metadata scraping functionality to the GUI	7	34

Plans For Coming Week

- UI Development - John and Ben
    - Create a user-friendly step-by-step guide on how to run the program.
    - Make sure all code is documented professionally.
    - Add final changes to UI design.
- Data - Madi and Lauren
    - Finish and finalize accuracy processing and data collection
- Recording image output - Jack and Ian
- Testing Improvements - Ian
    - Adding pictures of grass to No Crack dataset
    - This should improve the accuracy of crack detection if done correctly.