

SDMAY18-37 - System and app for managing general faculty/staff parking on ISU campus
Advisor: Ahmed E. Kamal

Donavan Brooks: Backend Lead
Derrick Lockwood: Team Lead
Joseph Krajcir: Quality Assurance
John Ingwersen: Mobile Master
Riley Snyder: Webmaster
Mason Schreck: Communications Lead

Weekly Summary:

Past Week Accomplishments:

Donavan Brooks: Integrated Image splitting with the predictor in our ML model. Images are split by parking space, these images are added to queue and multiple threads are used to run predictions on these images.

Derrick Lockwood: Got through merge request of tensorboard implementation. Finished optimizing of dataset.

Joseph Krajcir: Started installation of Mac OS X Yosemite on a virtual machine.

John Ingwersen: Working with react native outside of firebase/firestore to create interfaces and outlines.

Riley Snyder: Started threading individual components, also began to create the daemon that will run on the pre processing device.

Mason Schreck: Established website hierarchy, began to incorporate Bootstrap to reduce design overhead, deployed a few pages with Heroku.

Pending Issues:

Donavan Brooks: Find a more efficient way to share tensorflow sessions between threads. This could help improve execution time of predictions.

Derrick Lockwood: Finding where our model is failing only getting 50% accuracy for an unknown reason. Going to look into our model and see why.

Joseph Krajcir: Lots of troubleshooting involved with installing Mac OS X and macOS operating systems on a virtual machine. New issues are likely to pop up during installation.

John Ingwersen: Firebase/Firestore decision. Keep working with react native to better learn JS for what we need.

Riley Snyder:

Mason Schreck: Since I chose to deploy our web pages with Heroku via Github, there is an issue with pushing the files to gitlab. Instead it gets pushed as a sub-project and the files are not viewable in this form. I can push the individual files and directories by copy and pasting them manually to a branch, however that is garbage.

Individual Contributions:

Name	Individual Contributions	Hours This Week	Hours Cumulative
Donavan Brooks	Integrated image splitting with predictor model	9	69
Derrick Lockwood	Optimized and equalized dataset	8	88
Joseph Krajcir	Yosemite installation on virtual machine	8	54
John Ingwersen	Mobile UI improvements	8	58
Riley Snyder	Creating daemon	10	61
Mason Schreck	Placeholder pages and simple navigation bar	10	56

Comments and extended discussion:**Plan for coming week:**

Donavan Brooks: Improve execution time of predictions. Begin integrating with firebase so that lot information changes as parking spaces are predicted.

Derrick Lockwood: Continue to optimize model and work on any other issues with predictions and such for the presentation next week.

Joseph Krajcir: Finish installation and get React Native running on an iOS simulator, get Firebase and Cloud Firestore working on iOS simulator.

John Ingwersen: Continue UI design for mobile applications. Finalize early screen sketches for each interface.

Riley Snyder: Continue/Finish daemon.

Mason Schreck: Continue website functionality and design, incorporate Firebase. Investigate how to create a graphical overlay for parking lot 7.

Summary of weekly advisor meeting: