

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

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### **Weekly Summary:**

#### **Past Week Accomplishments:**

Donavan Brooks: Updated train data images. Train data now includes around 3500 images, roughly  $\frac{1}{3}$  are not\_vehicle images. Images are split into  $\frac{1}{2}$  for eval\_data and  $\frac{1}{2}$  for train\_data on training and evaluation op

Derrick Lockwood: Completed config management. Started working on Heuristic collection and Security lockdown on Firebase.

Joseph Krajcir: Lot overlay now dynamically changes its position. Reworked how the overlay boxes are created, allowing for a smaller file and making it easier to read and edit the lot component.

John Ingwersen: Worked on attaching each spot to a unique firebase reference to save on calls to the database. Also looked into deployment options.

Riley Snyder: Finalized pre processing setup. Began to test on main pi. Started doc on post processing device.

Mason Schreck: Worked on async canvas drawings and a more efficient way to draw other than hard coding spots. Researched render method outside of the angular "zone".

#### **Pending Issues:**

Donavan Brooks:

Derrick Lockwood: Our release date is being pushed back since we don't know about lot 7 and our front end doesn't have notifications.

Joseph Krajcir: None.

John Ingwersen: Getting an apple licences to release on app store and choosing a reliable deployment option.

Riley Snyder: Main pi is down while I reinstall and test it. Will come back up once the pi is re-installed correctly.

Mason Schreck: Efficiently drawing a single spot at a time versus whole canvas.

**Individual Contributions:**

<b>Name</b>	<b>Individual Contributions</b>	<b>Hours This Week</b>	<b>Hours Cumulative</b>
Donavan Brooks	Updated dataset	6	110
Derrick Lockwood	Completed Config.	8	128
Joseph Krajcir	Reworked overlay for lot112D-2	10	107
John Ingwersen	Deployment options	4	101
Riley Snyder	Setup scripts.	3	107
Mason Schreck	Worked on async drawings	3	98

**Comments and extended discussion:**

**Plan for coming week:**

Donavan Brooks: Finish updating logger and bug fixes on bounding box creator

Derrick Lockwood: Hotfix the training methodology to rename each file. Lock down security rules for front end and use a flag in the config to change the outputting of heuristics. Also collect the saved data from over break and make a new dataset out of it.

Joseph Krajcir: Start working on doc that walks through how to set up react native for android so other members on the team can run the app and make changes. Tie up any loose ends for the app so we can deploy the app. Find out how to deploy our app to the Google Play Store.

John Ingwersen: Finish app spot attachment and deployment.

Riley Snyder: Finish reinstallation of pi. Finish post processing doc.

Mason Schreck: Wrap up the async drawing and ensure efficient firebase reads, clean up spot drawing within the code, and splash/homepage with project description.

**Summary of weekly advisor meeting:**