

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: Finished script to create training and evaluation datasets.  
Derrick Lockwood: Implemented predictor to asynchronously look for file changes and run prediction and output the result to tensorflow. Also added logging system. Started training model on new dataset.  
Joseph Krajcir: Completed graphical overlay for lot 7, including support for handicap spots. Handicap and non-handicap spots are counted separately in the master branch app.  
John Ingwersen: Added handicap support for lots and spots within app and db.  
Riley Snyder: Fixed the spot image format and got the service running automatically on the pi.  
Mason Schreck: Filtered data to hide and show based upon active status, showed that different DOM elements are not exempt from this, researched angularfire website structuring.

#### **Pending Issues:**

Donavan Brooks: Add clickable aspect to admin tool  
Derrick Lockwood: Firestore entity write operations overflow from predictor need to optimize locally. Where the camera is going to be located in the parking lot 7.  
Joseph Krajcir: Rework overlay screen so the lot selected will show the correct lot image.  
John Ingwersen: Get the lot overlay library working with iOS dependencies.  
Riley Snyder: Getting the script to recover from errors and start up correctly after reboot  
Mason Schreck: Design

#### **Individual Contributions:**

<b>Name</b>	<b>Individual Contributions</b>	<b>Hours This Week</b>	<b>Hours Cumulative</b>
Donavan Brooks	Training, data collection, and dataset creation	7	86

Derrick Lockwood	Predictor, Logger	10	110
Joseph Krajcir	Completed graphical overlay	8	71
John Ingwersen	Mobile app improvements	8	78
Riley Snyder	Formatting, Daemon	9	80
Mason Schreck	Filter data, html manipulation	8	78

**Comments and extended discussion:**

**Plan for coming week:**

Donavan Brooks: Train model for upcoming week

Derrick Lockwood: Get a trained model plus evaluation of model and work on presentation for the upcoming Thursday.

Joseph Krajcir: Rework overlay screen to show the correct lot upon selection. Decide on the functionality of how the overlay is shown

John Ingwersen: Get the application to run on both iOS and android with all current dependencies.

Riley Snyder: Have script running 100% autonomously with no need for human intervention.

Mason Schreck: Solely design

**Summary of weekly advisor meeting:**