

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 adding clickable functionality to dataset creator tool. Redrew bounding boxes for test lot. Finished bounding box creator tool, this will be useful when we add new cameras.

Derrick Lockwood: Finished up concurrency issue with pre processing. Added multiple camera support. Added tool to view parking lot from said camera. Started on config manager

Joseph Krajcir: Started working on coupling the lot image with the graphical overlay. This will allow us to use a lot overview as its own component. Parking lot component gets and uses the parent view's dimensions.

John Ingwersen: Select a favorite spot specific to user.

Riley Snyder: Solved issue with images on post device. Finished script to install opencv on raspi. Working on post processing device environment.

Mason Schreck: Implemented web platform UI with spot drawing

#### **Pending Issues:**

Donavan Brooks: Updating dataset to help with false predictions

Derrick Lockwood: Optimizing training and collecting data.

Joseph Krajcir: Box height not correctly changing size to new view size.

John Ingwersen: None.

Riley Snyder: None.

Mason Schreck: Write render/update function to avoid screen refresh

**Individual Contributions:**

<b>Name</b>	<b>Individual Contributions</b>	<b>Hours This Week</b>	<b>Hours Cumulative</b>
Donavan Brooks	Added clickability functionality. Changed dataset to images with new bounding boxes. Completed Bounding Box Creator Tool	18	104
Derrick Lockwood	Tool and multiple camera support	10	120
Joseph Krajcir	Got parent view's dimension and position properties	13	97
John Ingwersen	Favoriting availability	7	97
Riley Snyder	Image issues, opencv install.	12	104
Mason Schreck	Implemented the first platform page for lot 112D-2, fought async issue	17	95

**Comments and extended discussion:**

**Plan for coming week:**

Donavan Brooks: Add new images to dataset. Update our logger

Derrick Lockwood: Finish up config manager. Add a lot more to the dataset.

Joseph Krajcir: Continue working on coupling lot image with graphical overlay

John Ingwersen: Add multiple firebase references for each spot so we dont have to redraw everything for one update.

Riley Snyder: Finish livespot installation script. Put that and opencv script together. Write up pre processing page in wiki as a guide for using the script.

Mason Schreck: Plan to write update/render function, and clean up the code, currently not so pretty, and being implementing angular routing for pages to flow and get our whole site navigation mapped out.