

# Live Feeds and Heat Maps User Interface Team



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ECE479

Senior Participation in VIP

2 Credit hours

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## *Brief description of the project*

In the Cam2 team, I have been contributing to the continuous analysis of hundreds of thousands of camera's around the world. This semester, the UI team wanted to make a web app that we could use to analyze cameras in local brick and mortar stores and give feedback in terms of heat maps and occupancy graphs.

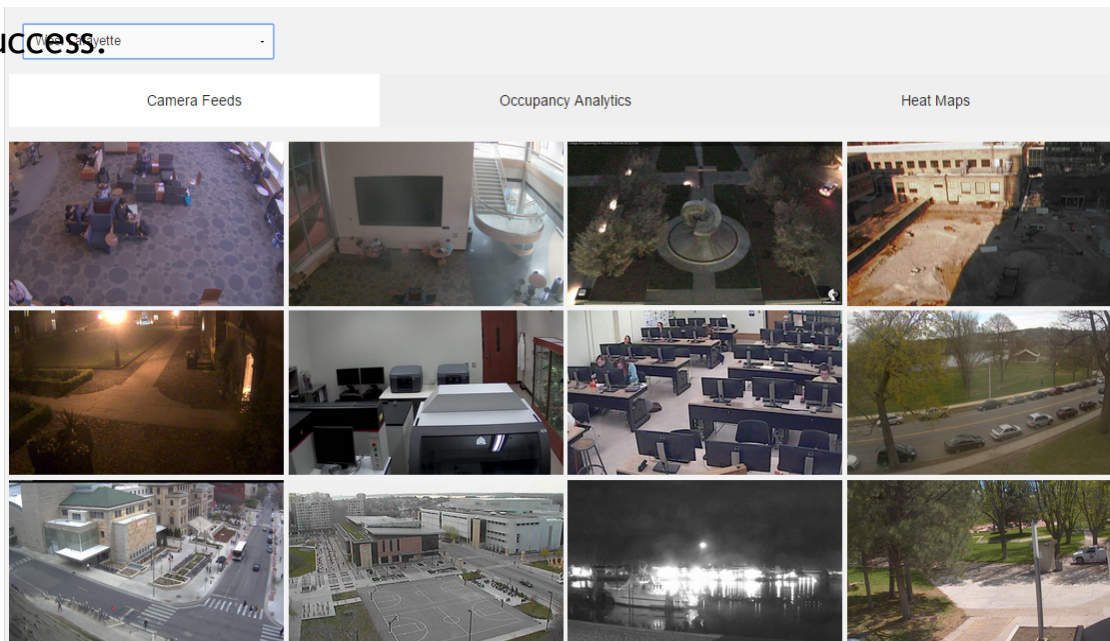
Before this semester, we have been unable to produce a live camera feed on any of our UI designs; only still images from live cameras. This semester, the various teams in the Cam2 Big Data team worked together to produce the image and cameras we needed to make our user interface web development mission a success.

After much implementation and many UI team meetings, the UI team decided on the layout of our final web app and what we wanted to be in the web app. The targets for this semester consisted of designing a web app that showed the thumbnails of the IP cameras we want, showing a modal of the live camera stream on click of the thumbnail, having a tab for the occupancy live graphing, and having a tab that displayed the heat maps given desired time stamps.

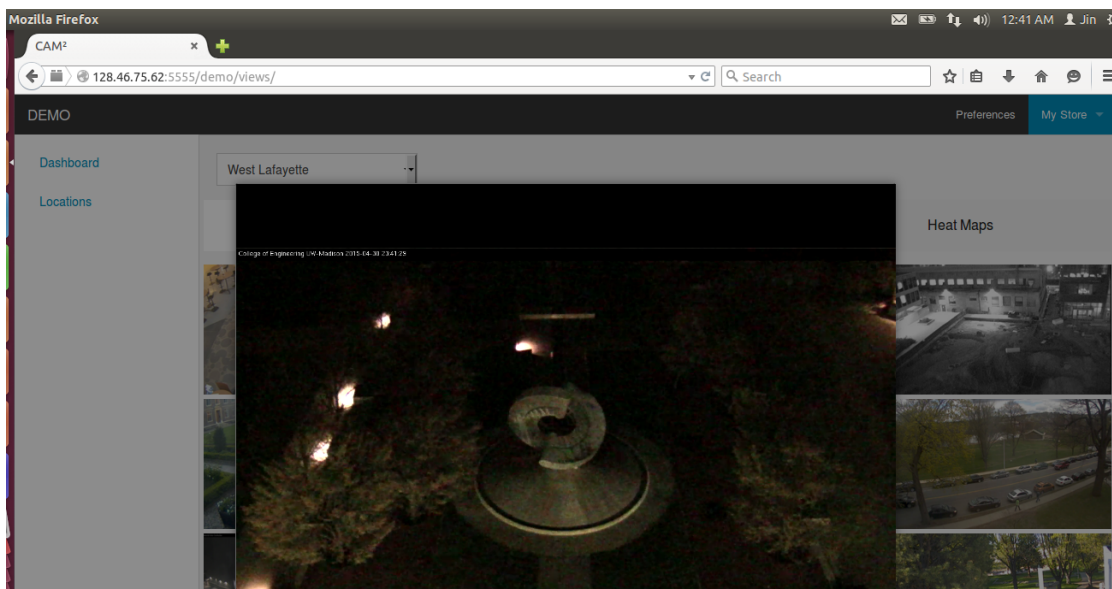
Here are the results of our team's labor and some of my individual contributions.

## *Brief summary of the results*

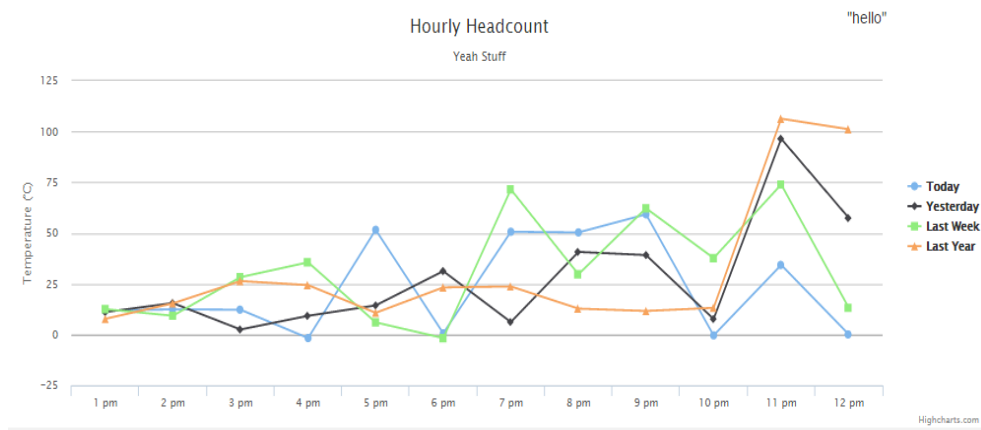
We encountered many problems along the way but the result was success.



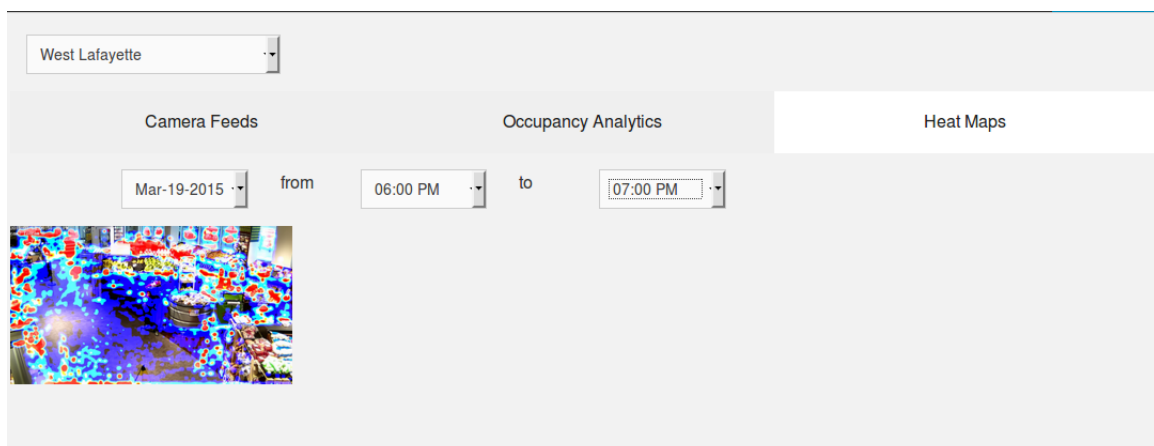
Thumbnails of available IP Cameras



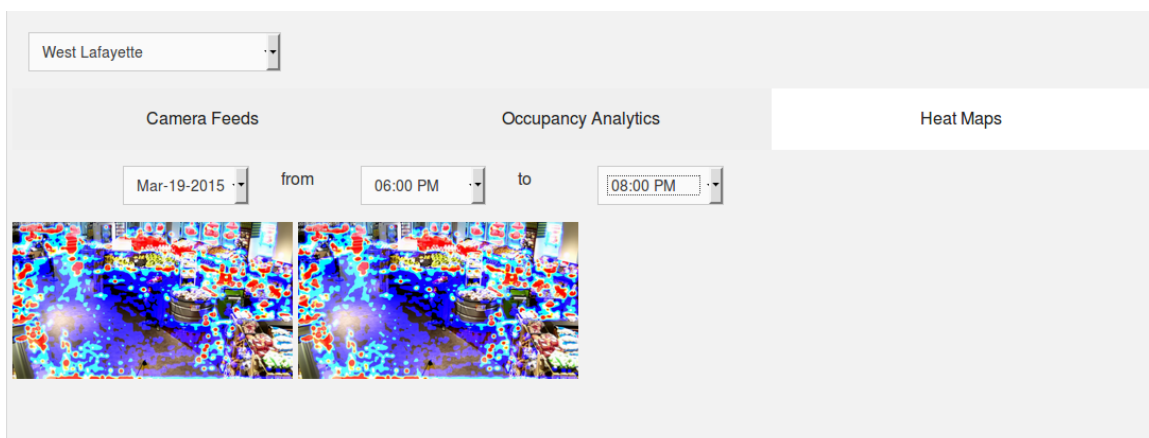
Modal of live camera feed that loads upon click of thumbnail



Sample headcount graph with randomized number generated inputs



Heat map display tab that shows heat maps based on time stamp input



Loads multiple if more times are chosen

From VIP with Cam2 this semester, I learned and utilized various tools needed for web programming such as HTML/CSS, Django web framework, Javascript, and some backend with MySQL. I also learned how to work on a team, working on a project that the world needs.

Presentations every other weekend also greatly improved my presentation skills and speaking skills. Presenting my mid semester results to professor Lu in a 15-20 minute presentation also improved my presentation skills.

From working with teammates and using Slack to communicate, I believe my communication skills also greatly increased. This semester was very successful in terms of my individual gain of skills and experience.

My individual contributions to the team this semester consist of being the first person to be able to integrate live streaming IP cameras into a web app that can be integrated into web site and reused at will. I also built the structure for displaying heat maps. I received a lot of help from my team leaders and teammates to make all of my tasks succeed.