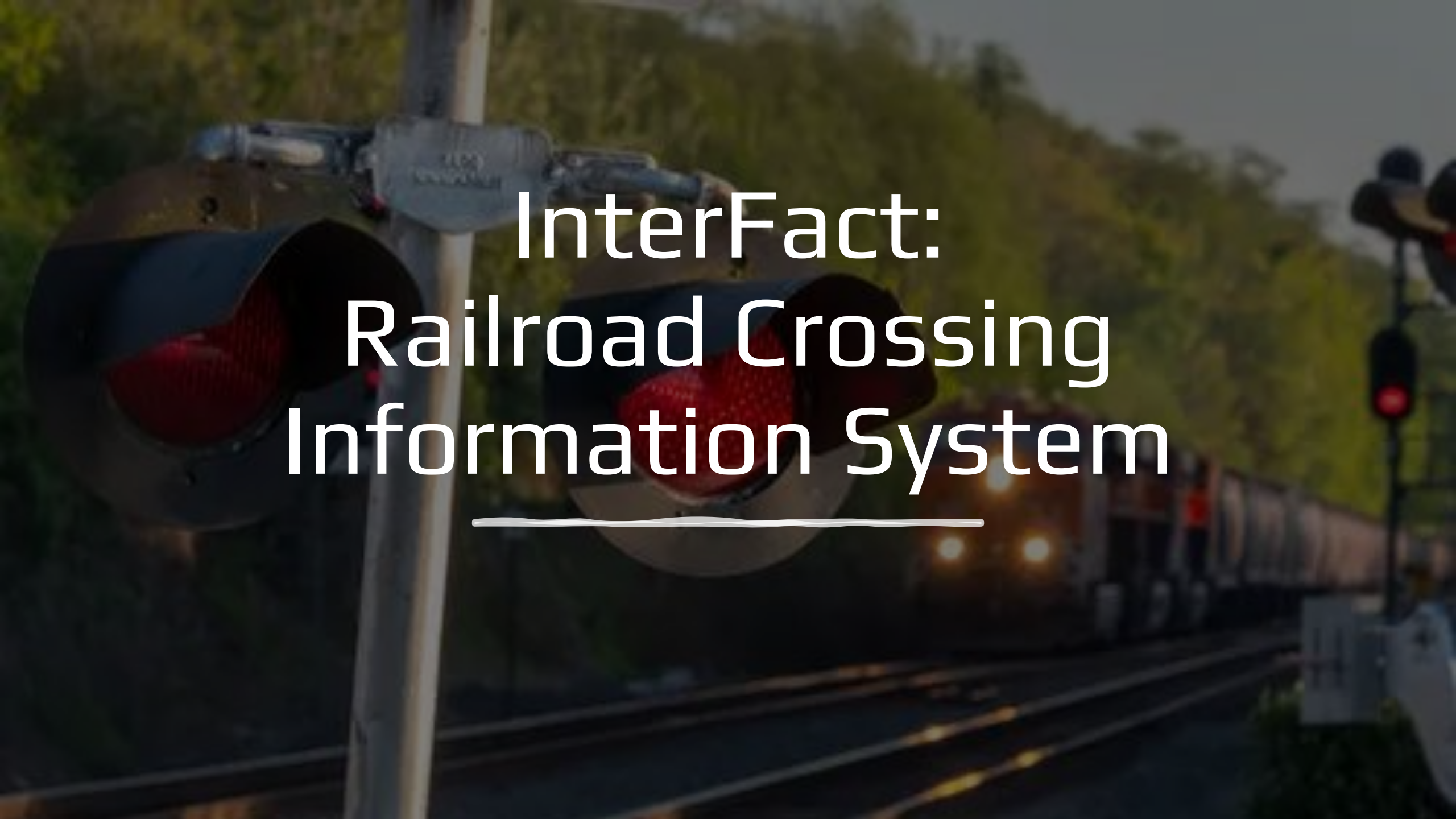


InterFact: Railroad Crossing Information System

InterFact Client & Information:

Huseyin Ergin

You know him

InterFact

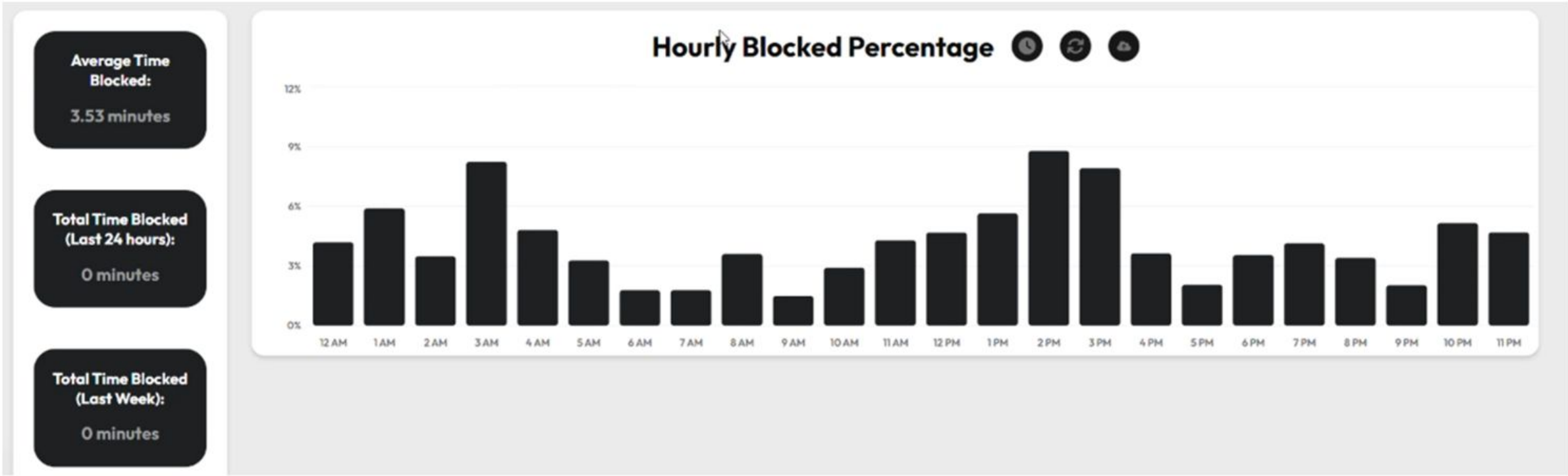
Determines if a train is blocking an intersection in Muncie, using cameras and machine learning

An Admin Dashboard for reviewing data about the InterFact system

5th Iteration Features

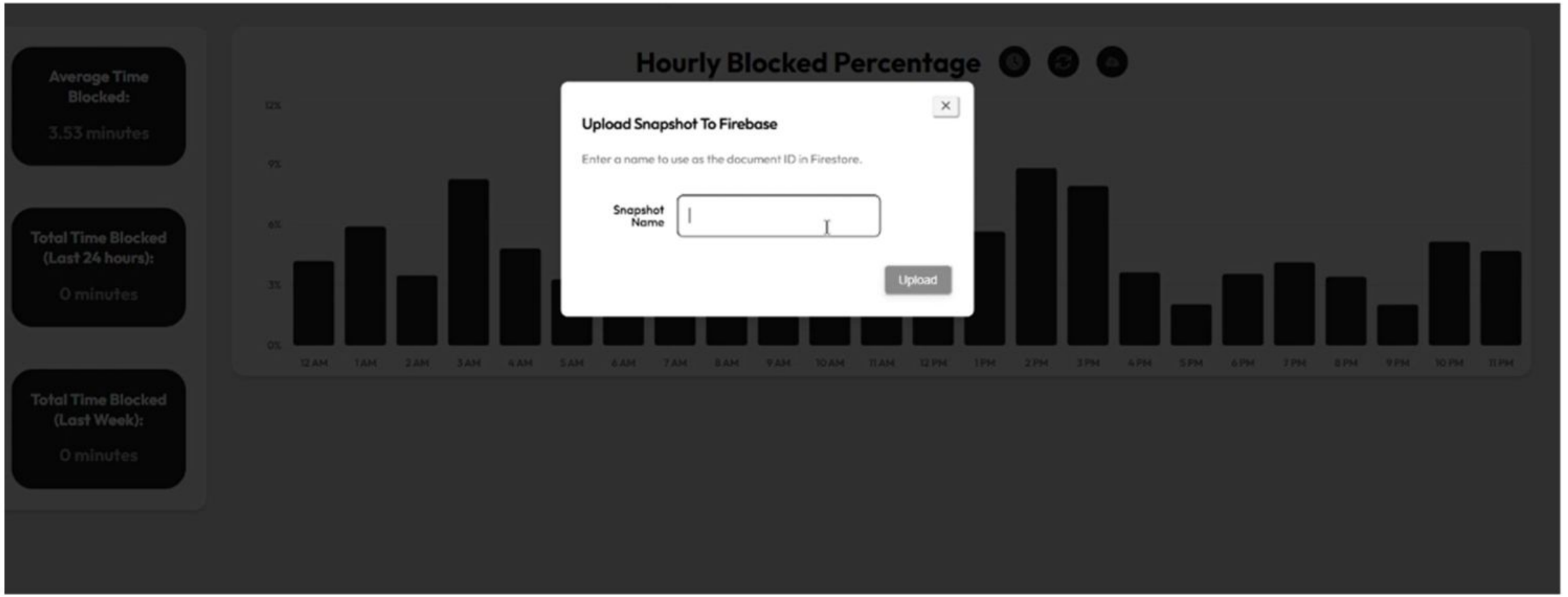
- Predictive Data!
  - Visualize statistics for every hour of the day!
- Run .py script on button press!
  - To retrain the model in the future
- Upload Snapshots straight to firebase!
- Refresh the dashboard to get new logs!

Interfact Iteration 5 Demo!



Predictive Data!

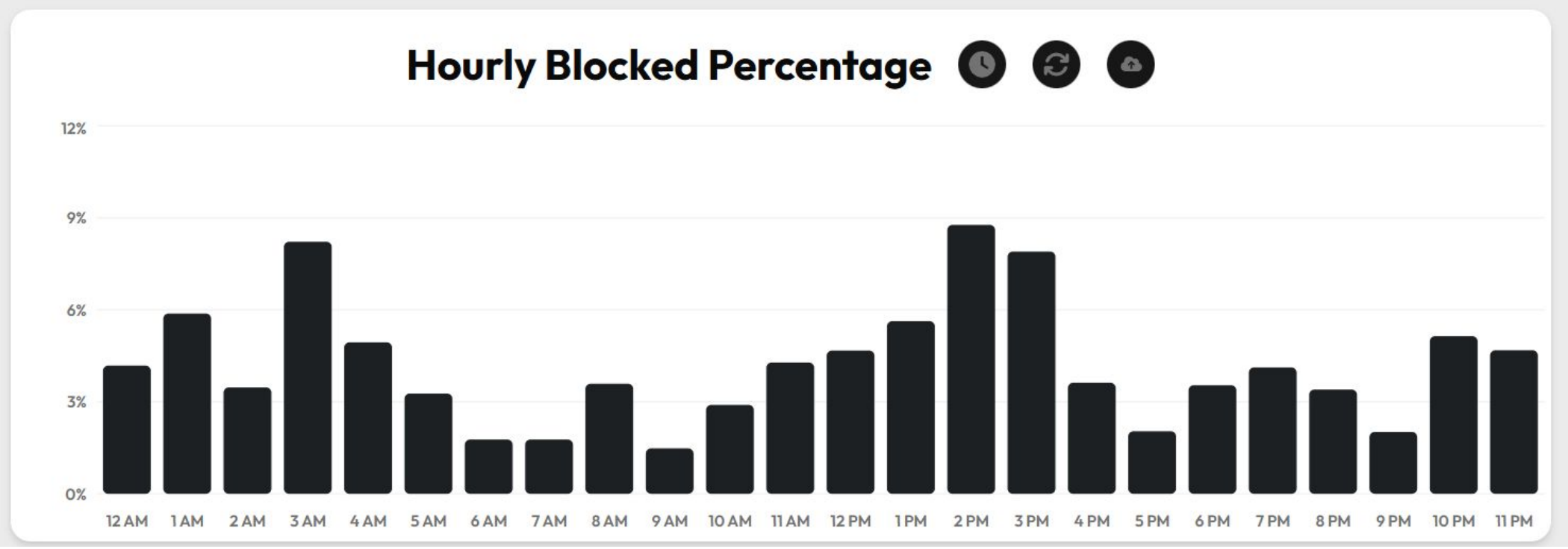
See the total intersection blocked percentage per day and per hour!



Upload Snapshot to Firebase!

Ethan

I worked on updating data analysis as well as uploading snapshots of the data to Firebase

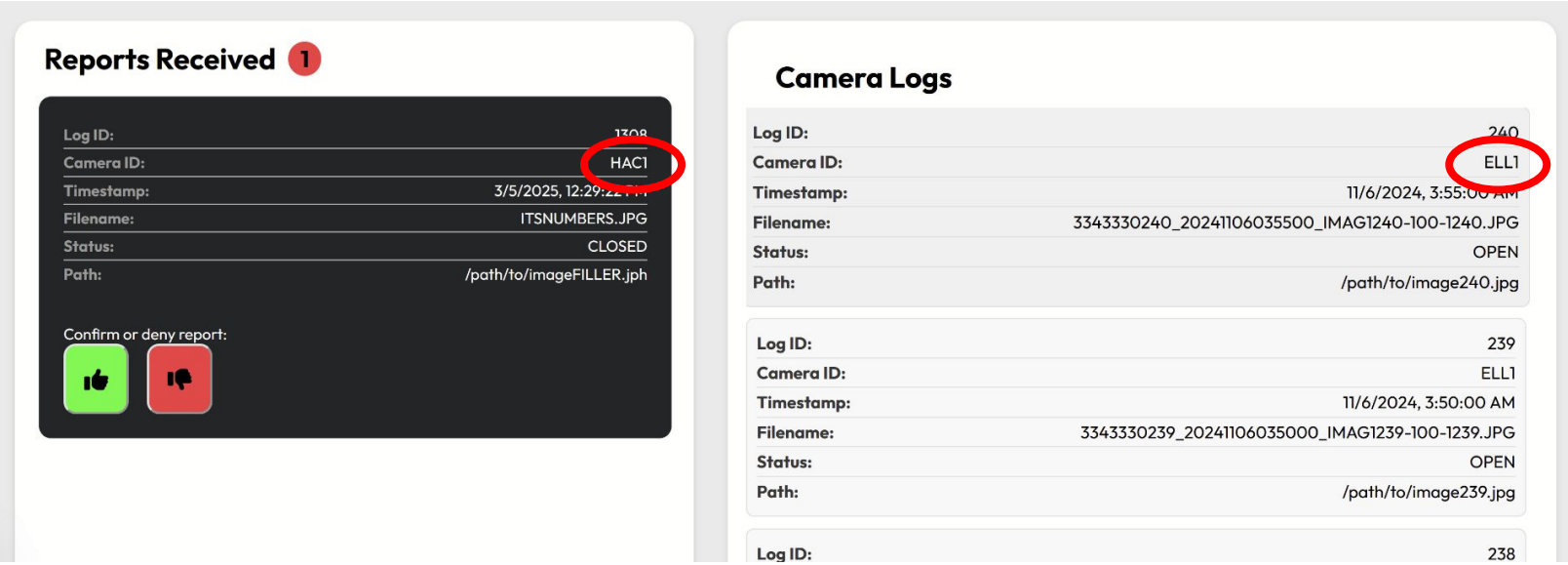


Brooke

File	% Stmts	% Branch	% Funcs	% Lines
All files	73	67.64	75	72.75

code coverage

I worked on testing the new features as well as fixing bugs the new features introduced.



bug showing reports for the wrong intersection

Tanner

I continued working on the transition to make it work across multiple page changes besides the links at the tops. I made it pretty modular besides the blocks on the dashboard since those need to be somewhere for the animation to play.

```
const navToIntersectionPage = async (id: string) =>{
    if (isPageAnimating()) return;

    await runPageTransition(true);
    router.push(`/Intersection/${id}`)
};
```

```
export function setupPageTransitions({ router, pathname }) {
  if (typeof window === 'undefined') return;

  const handleClick = (event) => {
    const link = event.currentTarget;
    const href = link.getAttribute('href');

    if (
      !href || href.startsWith('#') || href === pathname || href === lastNavigatedPath ||  isAnimating
    ) {
      event.preventDefault();
      return;
    }

    event.preventDefault();

    runPageTransition(false).then(() => {
      router.push(href);
      lastNavigatedPath = href;
    });
  };


  document.querySelectorAll('a[href]').forEach((link) => {
    link.removeEventListener('click', handleClick);
    link.addEventListener('click', handleClick);
  });

  revealTransition();
}
```

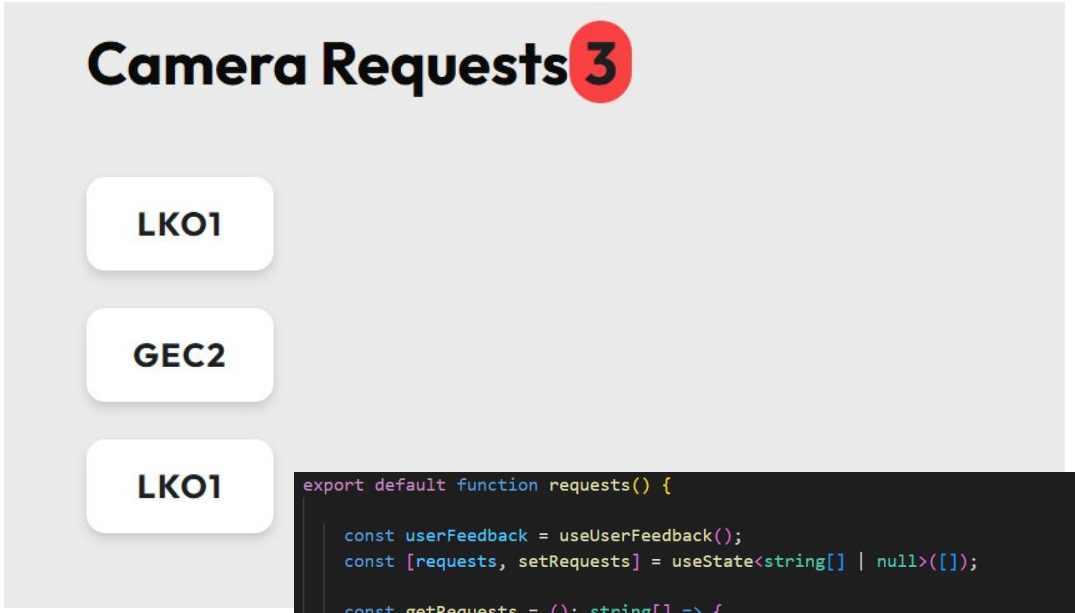
Mason

This Iteration, I created the Interfact poster for the symposium and showcases, and presented the project at each of the events.

Additionally, I worked on creating the presentation slides and updating the documentation.

Bella

I worked on connecting the Requests page to the database. The requests are now totalled at the top of the page and the requested intersections are listed below.




```
export default function requests() {

    const userFeedback = useUserFeedback();
    const [requests, setRequests] = useState<string[] | null>([]);

    const getRequests = (): string[] => {
        return userFeedback.flatMap(user => {
            if (Array.isArray(user.requests)) {
                return user.requests.filter((request : string) => {
                    return request
            });
            }
            return [];
        });
      };

    useEffect(() => {
    if (userFeedback.length > 0) {
        const fetchedRequests = getRequests();
        setRequests(fetchedRequests);
    }
    }, [userFeedback]);


    return (
        <div>
            <div className="request-main">
                <div><h1>Camera Requests<span className='item-reports'>{requests?.length || " - "}</span></h1></div>
            </div>
                {requests && requests.length > 0 ? (
                        requests.map((request : string, index) => {
                            return (
                              <RequestComponent request={request} index={index}></RequestComponent>
                            );
```

Mentor Feedback

- Feedback :
  Bradley gave very positive feedback on the new features and said that the newly implemented features looked to be very useful.

Client Feedback

- Feedback:
  - Would like to be able to see the hourly statistics for each day of the week instead of for the week as a whole.

- Changes Made:
  - Added notes & changes to the tasks to complete before the semester ends.

Planned Final Features:

- Implement a more detailed hourly statistics display.
    - Show hourly blockage data for each day of the week