

Interfact

Railway Intersection Information System

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? What Is Interfact?

Interfact aims to track & monitor the status and statistics of railway intersection traffic for use by both first responders and online users alike!



i Introduction

Using a live network of cameras and a machine learning model, Interfact is able to track the closure of railway intersections in the city of Muncie! The storage, filtration, and categorization of these logs allows the Interfact system to show train traffic trends, likleyhood of closure at specific intersections at specific times, and live city intersection blockage data up to the minute!

💡 TechStack

- React Framework
- Typescript
- Jest Tests
- Ant Design UI
- MySQL

Programmed with Microsoft Visual Studio

Versioned with GitHub



Meet The Clients!



Prof. Huseyin Ergin,
Ph.D.



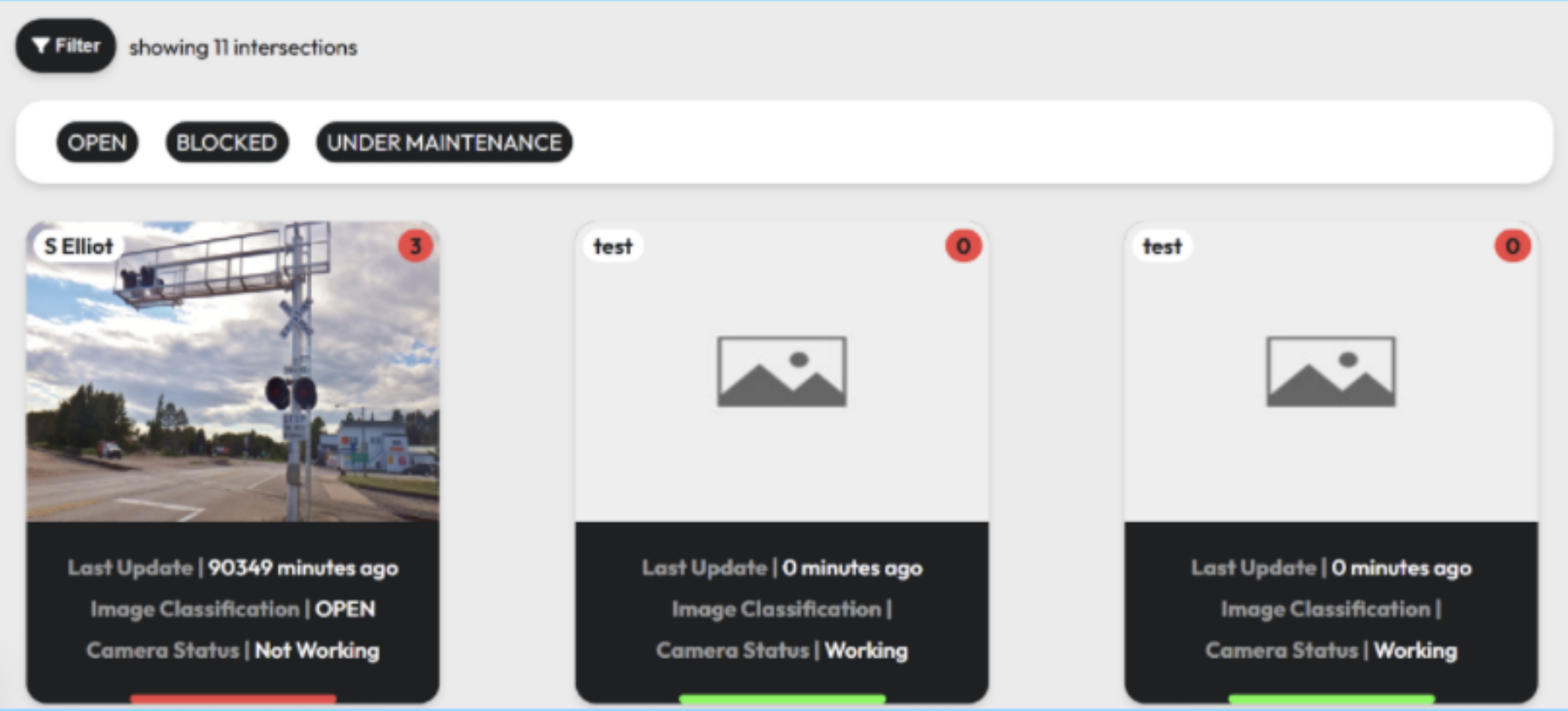
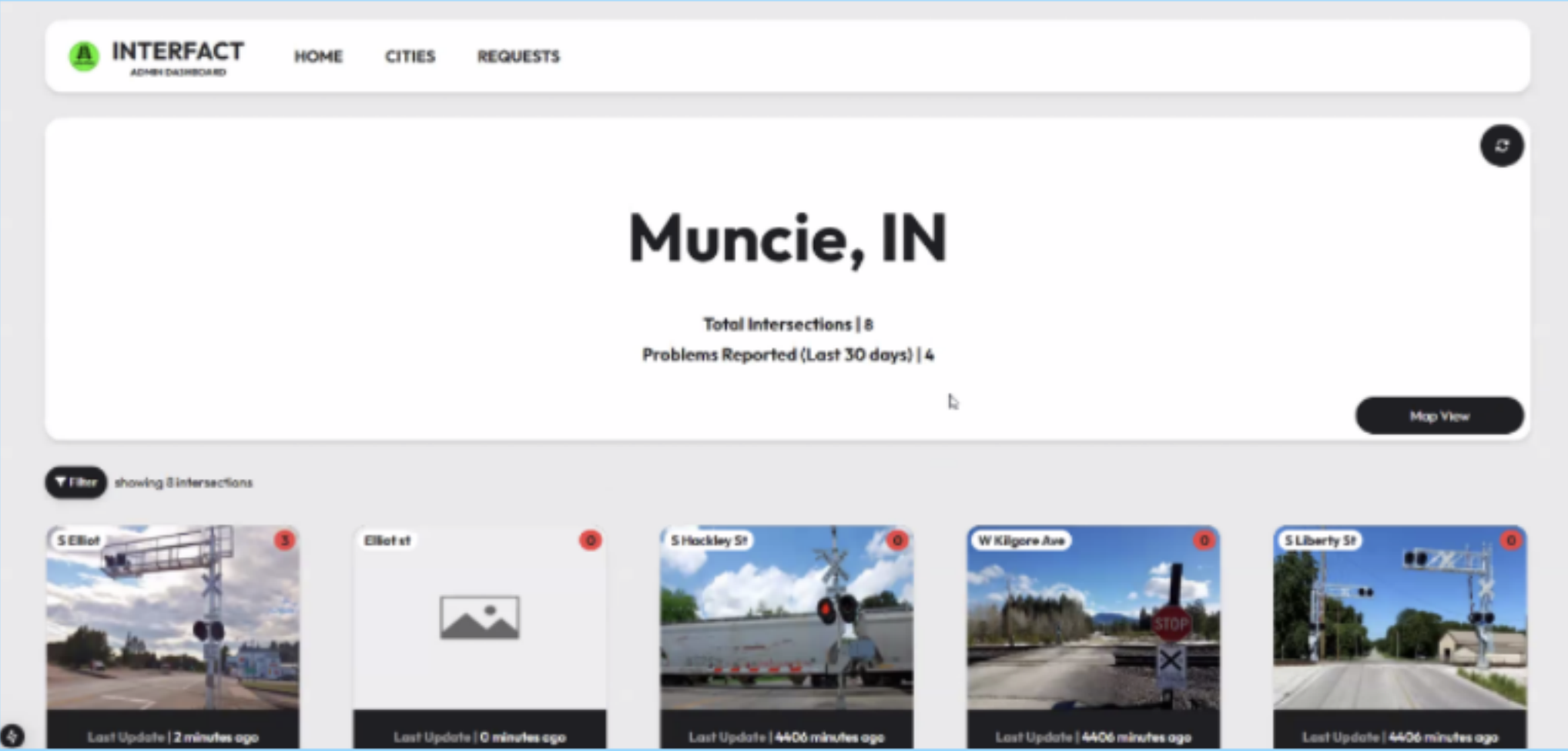
Kyle Johnson
CIO Muncie Office of
Information and GIS Services

🔍 Main Dashboard

The Interfact dashboard opens with an overview of the cities railway intersections and their current Blocked or Open status! Users can refine their searches by clicking the filter icon and applying one of the preset filters!

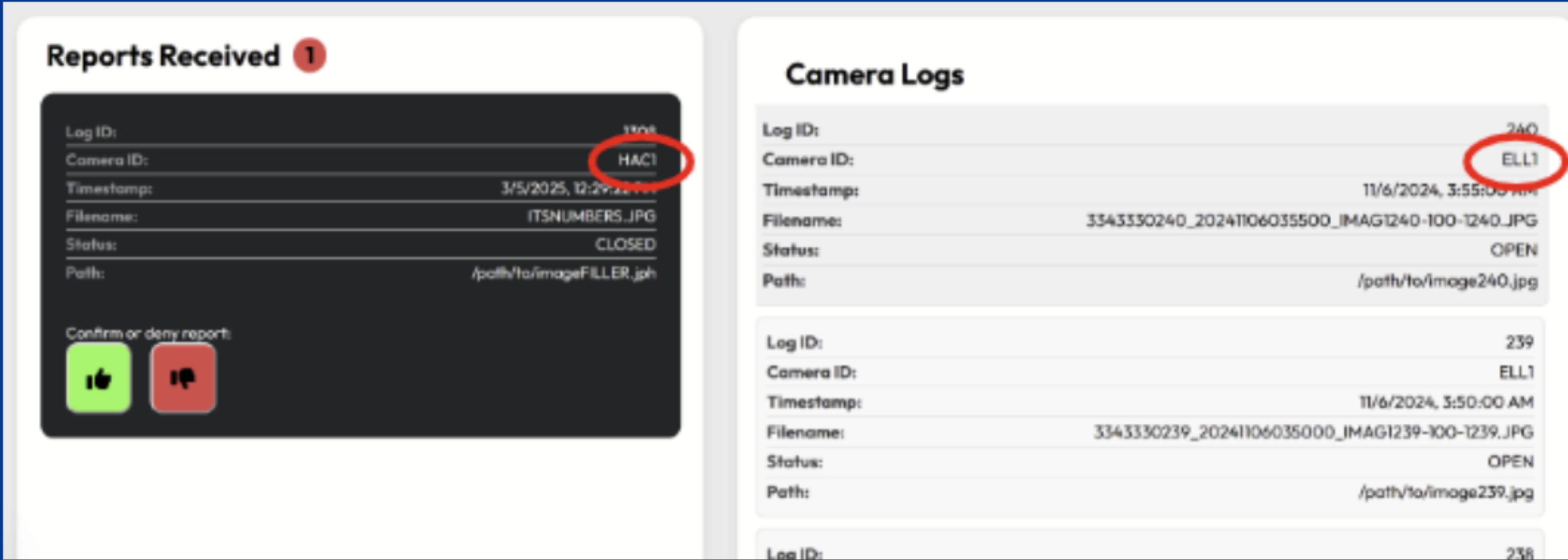


For more detailed information on a specific intersection, users can click on an intersection image card for previous camera entries, statistics, and more!



View Logs From The Dashboard!

Validate Intersection Status With One Click!



See Real Statistics!



The data logs for each intersection can be utilized to provide blocked intersection statistics for each hour of the day every day of the week!



” Conclusion

The Interfact project was an amazing experience to take on unique programming challenges in a new language & framework to facilitate progress in real world applications!

The project encapsulated several coding principals, taught us so much about testing & test coverage, and represented a major milestone in our academic careers!

Class Information & Special Thanks

- Project work was done through the CS 495 & 498 courses under the direction of Prof. Ergin. for the Capstone Project
- Special thanks to Bradley Vaal for your mentorship!