

HENRY ZIMMERMAN

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PROFILE

Highly competent Full Stack Web Developer, with experience in languages like **Java**, **C#**, **Rust**, and **TypeScript**. I have experience working in small teams using both **Waterfall** and **Agile (Scrum, Kanban)** software development methodologies.

EDUCATION

BS Software Engineering *Rochester Institute of Technology*

Aug 2019

RELEVANT EXPERIENCE

Assistant Maintainer (Open Source)
YewStack

April 2018 - Present
Boston, MA

I work directly on **Yew**, **Rust**'s largest **WASM** frontend web framework, contributing numerous bugfixes, added features, documentation and tests. As part of my work within the organization, I lead development on the **Router** implementation, as well as prototyping libraries to add support for **CSS** and to improve the ergonomics of the framework.

Software Engineer (Co-Op)
MedPoint Digital

Jan 2018 - May 2018
Evanston, IL

JWT Security Audit

Detected that a security flaw in a **JWT**-based authentication scheme being put in place for a **C#/.Net** distributed application which could allow privilege escalation attacks to occur. Created documentation demonstrating how exploit and fix the vulnerability in a way that made the system use fewer resources.

Uptime Monitoring Tool

Various services for a product had poor reliability and poor visibility for determining when they were unavailable, or if they had been down in the recent past. I wrote an internal tool using **C#/.NET Core** that would record the last three days of uptime for the company's services and displayed those metrics in a webapp written using **TypeScript** and **Angular**.

Software Engineer (Co-Op)
Ocient

Aug 2016 - Jan 2017 | May 2017 - Aug 2017
Chicago, IL

DB Configuration Client

I worked on a 2 person team on a webapp that would be used to configure, maintain, and monitor a massively distributed database that was being developed as part of the Ocient's core product offering. I wrote the backend using **TypeScript** and **NodeJS** - communicating with the database via **Protobuf**, as well as the frontend pages using **Angular** to add features for manipulating clusters and their constituent compute/storage nodes, and for configuring machine learning algorithms to run on those clusters.

Performance Monitoring Tool

Because the database engine development team didn't have insight into where performance bottlenecks were due to its distributed nature, they instrumented performance counters into their code, exposed them over **Protobuf**, and tasked me with writing a tool to extract their data. I wrote a Terminal User Interface using **C++** and **NCurses** to visualize this data in real time as well as exporting the collected data to **CSV**, allowing the database team to make informed changes to their code.

TEAM EXPERIENCE

Rowing Instructor Taught sculling to rowing novices of all ages as a Summer job.

2012 - 2019

RIT Men's Crew Rowed and Coxed for RIT's 2nd Varsity 8.

2014 - 2017