Jonah Rosenblum

jonaher@umich.edu | jonahrosenblum.com

Education

University of Michigan - Ann Arbor, MI

B.S. in Computer Science (2020), M.S. in Computer Science Engineering (2021)

Experience

Google Virtual

Software Engineering Intern

May-August 2021

- Analyzed inversion between network and application priority for high priority Google traffic.
 - Demonstrated correlation between network usage and application performance
 - Identified strategies to align priority of less latency sensitive traffic with appropriate QoS.
- Implemented feature to monitor success rate of system call across Java and Go net code.

Google Virtual

Software Engineering Intern

May-August 2020

- Implemented graceful shutdown of processes in OpenTelemetry to ensure all traces and metrics are exported before a Google Cloud Run instance is scaled down.
- Wrote five pull requests to resolve six issues across the opentelemetry-js, opentelemetry-operations-js, and opentelemetry-python repositories.
- Created prototype of metric exemplar feature, wrote extensive documentation to hand off project.

Under Armour Baltimore, Maryland

Collaboration Software Intern

May-August 2019

- Built custom Slack and Teams integrations using node.js and botkit to improve process for identifying and solving employee tech and infrastructure challenges. Saved company an estimated \$30,000 per year and greatly reduced resolution time for incidents.
- One of three interns selected to present to CTO and department heads.

Mia Learning Washington, D.C.

Software Development Intern

May-August 2018

- Developed in-house machine learning and data collection tools to improve the functionality of the company's core product, a chatbot, by working directly with the CTO.
- Streamlined data collection process via automation and pipelining, reducing time required from eight hours to 30 minutes and increasing chatbot's ability to interpret human language.

National Institutes of Health

Bethesda, Maryland

Research Intern

June-August 2016

- Analyzed the effects of chronic liver disease on patients with sleep disorders.
- Evaluated data sets for a clinical research paper and presented findings at medical symposium.

Technical Skills

Languages and Technologies

- Languages: C/C++, Python, Javascript/HTML/CSS, ARM Assembly.
- Technologies: React, Linux, Git, SQL, Bash Scripting, Pandas, Flask.

Relevant Courses

 Operating Systems & Advanced Operating Systems; Parallel Computer Architecture; Data Structures and Algorithms; Web Systems; Computer Organization; Software Engineering.

Personal Projects

- *CrockPi*: Raspberry Pi based controller for a slow cooker which modulates cooking time and temperature using a relay and sensors. Code available on <u>GitHub</u>.
- *Coevolution:* Evolutionary algorithm based simulation that showcases how an organism's brain and body can evolve in conjunction with one another. Code available on <u>GitHub</u>, <u>live demo</u>.
- *Haiku Review:* Twitter bot that creates haikus where each line is an abbreviated news article headline. Code available on GitHub, find @haikureviewlive on Twitter to see examples.