


Joshua Seligman

joshuaseligman18@gmail.com | 908-546-8784 | joshuaseligman.net

 joshuaseligman18

 linkedin.com/in/joshuaseligman18

Education

- **Marist College**

Master of Science in Software Development

- GPA: 4.00/4.00

Poughkeepsie, NY

Expected May 2024

Bachelor of Science in Computer Science

2020 - 2023

- GPA: 4.00/4.00
- Minors: Data Science and Analytics, Information Technology, Information Systems
- Activities and Leadership: Marist College Computer Society (*Vice President*), Hillel Club (*Treasurer*), Marist Ambassadors (*Member*)

Experience

- **Optum**

Technology Development Intern

Basking Ridge, NJ

Jun 2023 - Present

- Developing a tool to track business-level events as they occur within a pre-existing data pipeline.
- Building a web application with React.js and JavaScript to display the event history in a user-friendly way.
- Fetching necessary data with an Express.js API that queries an OpenSearch database.
- Modernizing CI/CD pipelines through the creation of GitHub Actions and workflows.
- Integrating the application into microservices by generating API requests using the Java Spring WebClient.

Technology Development Intern

Jun 2022 - May 2023

- Migrated Java Spring APIs from an on-premises environment to AWS EKS to reduce costs and increase availability.
- Improved CI/CD processes by creating new Jenkins pipelines and shell scripts to support everyday tasks and ease the transition to AWS.
- Transferred the data for the APIs to AWS OpenSearch and developed AWS Step Functions in Bash to streamline the process of uploading new data to the data stores.
- Automated events within the AWS ecosystem through Lambda functions written in Python that worked alongside other AWS resources.
- Provisioned new AWS resources with Terraform for a standardized infrastructure within the AWS environment.

- **Marist College**

Tour Guide

Poughkeepsie, NY

Mar 2021 - May 2023

- Gave tours to prospective students to show them around Marist's campus and answered their questions about the academic and social offerings at Marist.
- Assisted in the Admissions Office as an Ambassador by communicating with prospective students and helping guide them through the college search process.

Relevant Coursework and Projects

- **Software Development Coursework**

- Built a compiler in Rust for a custom language grammar that targets 6502 opcodes and RISC-V assembly.
- Developed an operating system in TypeScript that manages and executes programs and handles operations related to a virtual file system.
- Designed an algorithm to solve a variation of the hospitals and residents stable matching problem in C++.
- Built a virtual 6502 CPU in TypeScript and designed programs to run on the CPU using a subset of the original 6502 instruction set.
- Created a social media web application using the MongoDB, Express.js, EJS, and Node.js stack in JavaScript.
- Designed a database and utilized SQL to make tables and write appropriate queries.

- **Personal Projects**

- Created a virtual ARM processor in Go and utilized it as a package within a website built with React.js and JavaScript on the front-end and Gin and Go on the back-end.
- Used Python's OpenCV and Kivy modules for object detection in an app that promotes increased attention spans (Marist-IBM Datathon 3rd Place, 2021).