

EDUCATION

- **Worcester Polytechnic Institute** Worcester, MA
Bachelor of Computer Science with Distinction; GPA: 3.34 May 2020

EXPERIENCE

- **Nuance Communications** Burlington, MA (remote)
Software Engineer Jan 2022 - present
 - **Nuance Command Center (NCC) v2:** Rewrite of NCC vanilla JS app to React app. Leveraged FluentUI react components. Worked to meet UX design criteria & accessibility requirements.
 - **Update and Deploy Pipeline:** Created application consisting of .yaml pipeline and helper python script to conditionally update dependencies across multiple projects and deploy to QA environment. Leveraged Azure Devops APIs and executed git commands programmatically.
- **Nuance Communications** Burlington, MA (remote)
Associate Software Engineer Jun 2020 - Jan 2022
 - **Nuance Command Center (NCC):** Intended rewrite of legacy .NET app. Carried out work on javascript web application front end. Created Vue components from scratch, worked on Node.js backend. Communicated with multiple backend services.
- **Nuance Communications** Burlington, MA
Software Engineering Intern May - Aug 2019
 - **AWS EC2 Manager:** Developed ASP.NET web application to interface with AWS EC2. Allows configuration and management of VMs running pre-configured SOAP UI tests for load testing on Azure servers.

PROJECTS

- **Major Qualifying Project: GANs for Vehicle Trajectories:** Using Generative Adversarial Networks (GANs) to analyze and predict traffic patterns. Training model with trajectory data to generate trajectory data on an overlaid grid, then attempting to enhance resolution of given data.
- **Gateway Traffic Classifier:** Created Linux VM to act as network gateway between an Android VM and internet. Implemented decision tree model to classify the source application of packet traces in real time.
- **Game of Life:** Implemented Conway's game of life as an exercise to learn the Rust systems programming language. Used sparse matrix data structure for implementation.
- **Distance Vector Routing Protocol:** Implemented distance vector routing algorithm in C that maintains correct distance table with arbitrary node topology.
- **Alternating Bit Protocol:** Implemented version of Reliable Data Transfer in C. Simulated alternating bit protocol on transport layer.

RELEVANT COURSEWORK

Tools and Technology for Network Security, Advanced Computer Networks, Distributed Computer Systems, Intro to Artificial Intelligence, Data Analytics and Statistical Learning, Operating Systems, Foundations of Computer Science, Systems Programming Concepts, Algorithms, Accelerated Object Oriented Programming, Machine Organization and Assembly Language

PROFESSIONAL SKILLS

- **Languages:** Java, Python, C/C++, C#, JavaScript, Typescript, HTML/CSS, Rust, YAML
- **Software & Tools:** L^AT_EX, Git, .NET, Node.js, Vue, React, .NET, AWS, Azure, Figma, Veracode, Jest
- **Other:** Agile/Scrum
- **Certifications:** AZ 900, AZ 401