

Charlotte Clark

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Education

Worcester Polytechnic Institute

August 2019 - May 2023

Master of Science - Computer Science

GPA 3.5/4.0.

Bachelor of Science - Computer Science

Skills & Languages

- **Skills:** Git, AWS S3, ECS, and Lambda, Docker, Figma, NodeJS, React, Fastify, Elasticsearch, MongoDB, SQL, Coq, KeYmaera X Theorem Prover
 - **Languages:** Typescript, C, Racket, Python, Java
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Experience

WPI | Peer Learning Assistant

August 2022 - Present

- Grading projects and exams, hosting office hours, and validating homework assignments for an introductory course in C/C++

SimpliSafe | Software Engineer Intern

May 2022 - August 2022

- Designed and implemented a new microservice using Typescript and Fastify
- Defined new data schemas and persisted data in a DocumentDB cluster
- Deployed the service to AWS with Terraform

iD Tech | Online Instructor

December 2021 - March 2022

- Taught 10-12 year old students programming fundamentals and game implementation using the p5.js library and online editor

First Republic Bank | Software Engineer Intern

June 2021 - August 2021

- Developed a React website to visualize compliance with internal SDLC guidelines
 - Used Elasticsearch to store and query GitHub pull request data
 - Designed reusable graph and chart components to display data in a consistent and aesthetically pleasing manner
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Projects

Blinkers, Heat and Windshield Wipers | Model and proof in KeYmaeraX

- Modeled a system representing the power usage of safety-critical vehicle features using KeYmaeraX
- Formulated controls to prevent excessive power draw by climate control and ensure that critical features remain functional, while also accounting for cases where climate control itself is a critical system