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## EDUCATION

**Carnegie Mellon University** | May 2021 | B.S. in Computer Science | conc. In Computer Systems  
QPA of 3.68 | School of Computer Science Honors | University Honors | Dean's List

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## PROFESSIONAL EXPERIENCE

**Stripe** | Software Engineer II | February 2022 – current | Developer Environments team

- Co-designed/implemented a Kubernetes-like interface for developers to locally test a service mesh.
- Submitted patent for a “Service Interaction Violation Detector”, currently pending.
- Shipped networking infrastructure using Envoy that allows developers to configure local services to communicate with other services in different environments.
- Used Ruby, Golang, Linux/Bash, Bazel, systemd, Git/GitHub.
- Mentored project to surface errors to developers and help them identify who to contact for help.

**Watershed** | Software Engineer | July – October 2021

- Designed/implemented Marketplace, which offers carbon offset and removal products to customers.
- Debugged and enhanced planning software for emission-reductions.
- Shortened expected turn-around time to resolve customer issues from a week to a day.
- Used TypeScript, React, GraphQL, PostgreSQL, Vim and VS Code, Git, GitHub for CI/CD, and Agile.

**Facebook** | Production Engineer Intern | Summer 2020

- Automated a resource migration to save an estimated \$1.5 million for Marketplace.
  - Created a CLI tool and dashboard monitoring system and wrote associated documentation.
  - Used Python with object-oriented programming, Vim and VS Code, Mercurial, Linux, Facebook's custom CI/CD application, and Agile.
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## PROJECTS

**Menix Operating System**

- Created a fully-functioning kernel with multi-threading, virtual memory, exception, and I/O.
- Debugged using GNU Debugger, tested on a virtual machine, and used C with object-oriented programming, Git, Linux, and Intel's x86 specification.

**Prediction of Fire Severity in the Peatlands** | ProjectX Competition | [paper](#)

- 2<sup>nd</sup> place against top international CS/AI colleges in the Weather and Natural Disaster Prediction category of the ProjectX competition.
- Managed a team of six students from CMU to apply machine learning to peatland fire prediction.
- Used Python with OOP, data APIs, Pandas, scikit-learn, matplotlib, and PyTorch.

**Pith Discussion Platform** | Undergraduate Thesis | [thesis](#)

- Co-created a novel platform that encourages productive discussion through group meta-reflection.
  - Conducted user studies, architecting the user study software and co-writing the research plan.
  - Used JavaScript, Python with object-oriented programming, React/Svelte, WebSockets/Socket.IO, Redis, MongoDB, Docker, HAProxy, Git, Linux, and AWS.
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## COURSEWORK

(15-410) Operating Systems | (15-411) Compilers | (15-440) Distributed Systems | (15-418) Parallel Architecture and Programming | (15-451) Algorithms | (17-377) AI Methods for Social Good | (10-315) Machine Learning