

Eric Shen

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EDUCATION

Cornell University

B.A. in Mathematics and Computer Science

GPA: 3.8/4.0

Relevant Coursework: Data Structures & Algorithms, Functional Programming, Abstract Algebra

May 2028

Ithaca, NY

EXPERIENCE

Cornell Electric Vehicles

Telemetry Engineer

- Architected a ROS2 telemetry system over Starlink + Tailscale, configuring FastDDS shared memory transport to achieve end-to-end sensor latency under 30ms for live sensor data during vehicle drives and competition
- Developed a C++ MCP251863 CAN FD driver from scratch to handle message transmission and reception
- Built a React + FastAPI dashboard to visualize 10+ live sensor streams for real-time vehicle diagnostics

Sep 2025 – Present

Ithaca, NY

Cornell Data Strategy

Technical Implementation Associate

- Built a full-stack operations platform for an energy services contractor using React, FastAPI, and PostgreSQL, replacing manual Excel workflows with a centralized pipeline integrated with ServiceTitan CRM data

Jan 2026 – Present

Ithaca, NY

Kagi Inc.

Community Specialist

- Collaborated directly with the CEO on strategy for Orion Browser, triaging 10k+ user-reported issues to identify critical weaknesses and align roadmap priorities
- Led design and ideation for a new profile management system, redesigning each profile as an isolated process to improve security, stability, and performance

Aug 2024 – Jun 2025

Remote

Rutgers University

Researcher under Dr. Desmond Lun

- Modeled bee population dynamics using probabilistic simulations to predict colony growth and honey yield
- Built a data visualization tool using Python + Chart.js to visualize model sensitivity and colony forecasts

Jun 2024 – Sep 2024

New Brunswick, NJ

Raycast (YC W20)

Community Developer

- Built 3 extensions (80k+ downloads) in TypeScript + React; contributed to 12+ extensions (1.5M+ downloads)

Apr 2021 – Present

Remote

PROJECTS

C Compiler in OCaml — mfl

- Developed a C compiler, targeting LLVM IR, with a custom lexer, recursive descent parser, and typechecker

mdnotes — mdnotes

- Built a Python CLI that syncs Goodnotes files from Google Drive and converts handwritten notes to Markdown
- Designed a pipeline with incremental sync, PDF rendering, and transcription using the Claude API

macOS Notes App — knot

- Designed a minimal SwiftUI-based interface with custom window management for keyboard-driven note taking
- Implemented autosave, markdown rendering, live preference updates, and a fully customizable appearance

macOS Hotkey Daemon — smhkd

- Developed a low-latency macOS hotkey daemon in C++23, using event tap APIs and a custom DSL

AWARDS

5x AIME Qualifier, USACO Gold

SKILLS

Languages: TypeScript, Python, C/C++, Java, Rust, OCaml, Bash

Frameworks & Libraries: React, FastAPI, Next.js, NumPy, Matplotlib

Developer Tools: Git, Linux, Docker, Tailscale, PostgreSQL, Nix