

# Kai Geffen

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## EDUCATION

### UNIVERSITY OF MASSACHUSETTS AMHERST

#### BS IN COMPUTER SCIENCE

Feb 2017 | Amherst, MA

Cum. GPA: 3.51 / 4.0

Major GPA: 3.77 / 4.0

### GREENFIELD COMMUNITY COLLEGE

#### AS IN MECHANICAL ENGINEERING

Aug 2012 | Greenfield, MA

Cum. GPA: 3.93 / 4.0

## LINKS

Personal: [KaiGeffen.com](https://kaigeffen.com)  
Github: [KaiGeffen](https://github.com/KaiGeffen)  
LinkedIn: [kai-geffen](https://www.linkedin.com/in/kai-geffen)  
X: [@kai\\_geffen](https://twitter.com/kai_geffen)

## COURSEWORK

### GRADUATE

Advanced Information Assurance

Formal Language Theory

Programming Languages

### UNDERGRADUATE

Artificial Intelligence

Computer Networks

Operating Systems

Social Issues in Computing

## SKILLS

### PROGRAMMING

Over 10,000 lines:

Typescript

Over 5,000 lines:

Python

Over 1,000 lines:

OCaml • Rust • Ruby • C# • Java

Familiar:

Docker • PostgreSQL • Figma

## EXPERIENCE

### IRONMILL | CHIEF TECHNOLOGY OFFICER

Jun 2023 – Dec 2023 | New York, NY

- Lead a 6 person team to design and build a Zero-Knowledge Circuit package-manager MVP with 30 users
- Raised 2.6 million dollars in pre-seed to explore developer-tooling products in Zero-Knowledge cryptography
- Detailed our design goals in UML diagrams and specifications
- Split development into actionable tasks, set best practices, and provided feedback through PRs to meet project priorities and mentor junior developers
- Executed end-to-end development in Python and Typescript for both frontend and backend

### CELESTIAL TCG | LEAD SOFTWARE ENGINEER

May 2021 – Feb 2023 | Boston, MA

- Managed a 5 person team to develop a real-time web-app game **available online** for both desktop and mobile
- Designed, built, and deployed the project, using Typescript for client-side code, Python for server-side, and Postgres for database management
- Use Websockets for connecting to the server, OAuth for account management, Git for version-control, DigitalOcean for cloud hosting, and Canvas for front-end visuals
- Designed mockups in Figma for mobile and desktop user flow

### SOMALIVE | SENIOR SOFTWARE ENGINEER

Nov 2020 – May 2021 | Northampton, MA

- Designed, built, and tested an audio-mixing application which allowed us to raise 250 thousand dollars in seed funding
- Performance optimized the mixing of high-quality audio, improving the time from over a minute to down to 3 seconds on consumer hardware
- Researched and implemented the technology-stack and testing framework
- Implemented the project in Python with clean front-end, efficient and robust audio mixing, and intuitive data collection and analysis

## ACHIEVEMENTS

- Presented on Virtual-Machine benchmarks at **Microsoft's ZK event**
- Lead a Zero-Knowledge **conference in NYC** with 30 attendees, 5 speakers
- Tutored math for a decade
- Scored 4th in the Northeast on a **national math exam**
- Served on a board of directors for a non-profit with 600 annual participants
- Managed a **website redesign** for Dance New England focused on accessibility for participants with diverse needs
- Had a summer internship at **Fiksu**, a mobile-marketing software company
- Had a year long internship at **Atalsoft**, an image-processing software company