

# Joshua Zhou

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## EDUCATION

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### Columbia University

New York, NY

*BS in Computer Science*

*September 2020 – May 2024*

- GPA: 4.09/4.0 (summa cum laude)
- Coursework: Operating Systems, Networks, Programming Languages & Translators, Advanced Systems Programming, Cloud Computing, Advanced Databases, Embedded Systems, Artificial Intelligence, Parallel Functional Programming, CS Theory
- Activities: Head Teaching Assistant (Intro to Databases), Tau Beta Pi, Upsilon Pi Epsilon, Tennis

## WORK EXPERIENCE

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### Datadog

New York, NY

*Software Engineer Intern (Cloud Networks)*

*May 2023 – August 2023*

- Migrated previously barebones API for managing allocation and assignment of IP addresses to new framework
- Standardized request and response structure and added authentication and authorization capabilities
- Rewrote key parts of team's architecture to account for changes and take advantage of new API

### Coinbase

Remote

*Software Engineer Intern (Ledger)*

*May 2022 – September 2022*

- Provisioned resources for new background job management system and converted database cleanup code to cron job
- Wrote logic for gRPC endpoint that allows other services to request job runs and pass in parameters
- Built tool that calls endpoint to transfer small amounts of crypto between accounts and resolves common CX issue that previously required ledger intervention

### Perfect Corp

Remote

*Data Consultant Intern*

*May 2021 – May 2022*

- Developed software productivity tools for backend content management system to facilitate uploading and maintenance of hundreds of products daily
- Oversaw product data for over 20 important brand partners, including Estee Lauder and Shiseido
- Trained new hires on navigating company's content management system and designed slide decks to document best practices

## PROJECTS

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### FPGA Music Mixer

New York, NY

*Student*

*March 2024 – May 2024*

- Created FPGA-powered music mixer capable of adding effects including low & high pass filtering and echo to two songs in real time
- Implemented hardware FFT, data stream synchronization, interrupt handlers, and more using SystemVerilog and C

### CoBruh Programming Language

New York, NY

*Student*

*September 2022 – December 2022*

- Coded scanner, parser, semantics checker, and LLVM IR generator in OCaml for CoBruh, a type-safe Pythonic language
- Implemented features including type inference, significant whitespace, arrays, functions, and control flow

## SKILLS & INTERESTS

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**Skills:** Go, SQL, Mongo, Python, Java, C, Wolfram Mathematica, AWS, Git, Tutoring

**Interests:** Software Engineering, Networks, Databases, Application Development, STEM Education