

Joshua Zhou

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EDUCATION

Columbia University

New York, NY

BS in Computer Science, Minor in Applied Mathematics

September 2020 – May 2024

- GPA: 4.09/4.0
- Coursework: Operating Systems, Cloud Computing, Parallel Functional Programming, Networks, Advanced Databases, Programming Languages & Translators, Artificial Intelligence, Fundamentals of Computer Systems, CS Theory, Advanced Programming, Data Structures
- Activities: Head Teaching Assistant (Intro to Databases), Tau Beta Pi, Tennis, Rock Climbing

WORK EXPERIENCE

Datadog

New York, NY

Software Engineering 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 Engineering 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 to allow 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 created slide decks to document best practices

ACADEMIC PROJECTS

Optimizing Convolutions

New York, NY

Researcher

January 2023 – May 2023

- Extended existing parser to recognize declarative syntax for representing convolutions
- Experimented with improving performance of convolutions by modifying memory layout of Goto's algorithm

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

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

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