

Alex Chen

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Education

Yale University, New Haven, CT, Expected May 2023

B.S. Computer Science and Ethics, Politics, & Economics; GPA 3.83/4.0

Work Experience

Incoming Software Engineering Intern, *Snap Inc.*, Los Angeles, CA

May 2022 - August 2022

- Will work on the A/B engineering team in the product pod, collaborating with product managers, designers, and data scientists to improve the internal A/B experimentation platform and configuration management system.
- Used React, TypeScript, and AWS Lambda to execute end-to-end refactor of configuration change request page used by 1000+ internal customers, implementing option for auto-commit after successful CI build.
- Designed and implemented quantile visualizations for engagement metrics.

Software Engineering Intern, *Dreambound*, San Francisco, CA

June 2021 - August 2021

- Used React, TypeScript, NodeJS, and GraphQL to build internal and customer-facing portals within agile team with the mission of promoting upward economic mobility through access to vocational training
- Led refactor of bulk import tool from front-end to back-end as part of ORM refactor from Prisma to Objection.js
- Implemented production-ready migrations, geocoding lookups through Google Maps API, sorters and filterers, database seeding, PostGIS distances, and various bug fixes and UI improvements

Product Management Intern (Digital Services), *NYC Mayor's Office of the CTO*, Remote

May 2020 - August 2020

- Built digital solutions for NYC government agencies connecting New Yorkers to government services
- Scoped and implemented MVP for modular open-source translation pipeline for city agencies, designing data architecture, conducting user research with government stakeholders, and integrating existing open-source tools
- Automated Adobe InDesign and Illustrator using ExtendScript to complete project mapping broadband access

Teaching Assistant, *Yale Biomedical Engineering Department*, Remote

May 2021 - December 2021

- Assisted in project-based curriculum development for BENG 406 (Medical Software Design)
- Focused on product management strategies for medical applications, with an emphasis on the modern healthcare regulatory environment and software validation

Undergraduate Learning Assistant, *Yale Computer Science Department*, Remote

September 2020 - Present

- Led weekly discussion sections, held office hours, graded assignments, scribed lecture notes, and assisted in writing C code for CPSC 223 (Data Structures and Programming Techniques) and CPSC 365 (Algorithms)
- Topics included data structures (arrays, stacks, queues, lists, trees, heaps, graphs), sorting and searching, storage management, and data abstraction; greedy algorithms, divide and conquer, dynamic programming, network flow, NP completeness, and approximation

Projects and Awards

Modeling Systemic Inequality Within Police Organizations with an Agent-Based Model

As a [JURIST Digital Scholar](#) and [HASH Fellow](#), conducted research culminating in an agent-based model of police organizations and the communities they serve, emphasizing the difference between “a few bad apples” and actual systemic inequality, exploring the causal role of policy reforms in resolving police brutality.

Yale Emergency Support (YES) — New Haven Pandemic Task Force

Worked with 5-person team to develop emergency pandemic volunteer management and training [web app](#) for the City of New Haven, matching 500+ users to volunteer opportunities with city government and 20+ New Haven nonprofits.

Hackathons

Placed top five in YHack 2019 by developing community-building app for mental health with mapping software and augmented reality features. Won Best Computational Hacks in AtomHacks 2018 by analyzing webpages’ political biases with natural language processing.