Alex Chen

alex.chen.ac@yale.edu | https://itsalex.me | (917) 966-0965

Education

Yale University, New Haven, CT, Expected May 2023
B.A. Computer Science and Ethics, Politics, & Economics; GPA 3.92/4.0

Work Experience

Digital Services Intern, *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 developed 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

Undergraduate Learning Assistant, *Yale Computer Science Department*, Remote   September 2020 – Present
- Held office hours and assisted students in writing and debugging C code for CPSC 223: Data Structures and Programming Techniques
- Topics included data structures (arrays, stacks, queues, lists, trees, heaps, graphs), sorting and searching, storage allocation and management, and data abstraction

App Developer, *Yale Student Technology Collaborative*, New Haven, CT   October 2019 – Present
- Used Ruby on Rails, React Native, RESTful APIs, and Bootstrap to develop web and mobile apps used by thousands in the Yale community, with experience in the full Software Development Life Cycle
- Currently working on mobile ridesharing app for Yale students with React Native front-end, Rails back-end

Intern, *Office of NYS Assemblymember Yuh-Line Niou,* Lower Manhattan   June 2017 – September 2018
- Researched and composed legislative memos about topics including rent control, public health disparities within Chinese-American immigrant communities, and the proposed L train shutdown
- Aided constituents over the phone, at mobile district offices, and at events
- Automated processes by writing low-maintenance scripts to gather info (e.g., construction permits)

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 (http://newhavenhelpwithcovid.com/) for the City of New Haven, matching 500+ users to volunteer opportunities with city government and 20+ New Haven nonprofits.

Independent Political Science Research
Conducted independent study applying political typology to Congress using congressional databases. Named Regeneron STS 2019 semifinalist and won NYCSEF 2019 First Award.

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.

Skills

Programming Tools: Django, Ruby on Rails, React, Bootstrap, Python, JavaScript, Java, C#, C
Languages: Mandarin, Hokkien