## **Ben Backus**

703-851-7446 • mbbbackus@alumni.stanford.edu • Great Falls, VA • Stanford, CA

## TECHNICAL SKILLS SUMMARY

Languages & Tools

Python, Java, C, C++, JavaScript, HTML5, CSS3, Git, Django, Tornado, React, Vue, Angular, Selenium, Postgres, SQL, MongoDB, AWS & Google Cloud

Concepts & Theory

full-stack, machine learning, image recognition, NLP, data scraping & cleansing, design patterns, unit testing, graphics, optimization, computability theory, complexity theory

## **EDUCATION AND TRAINING**

Stanford University, Class of 2020 3.5 GPA

- B.S. Symbolic Systems (Computer Science) June 2020
- Coursework in machine learning and deep learning (CS109, CS124, CS221, CS230) and Computability Theory (CS103, CS154, Phil 152, Phil 162)
  Video design and set automation for student-run theater production of

Chicago, 2018

## **WORK EXPERIENCE**

Stanford University R&DE Sustainability Department, Stanford, CA Lead Software Engineer & Hardware Engineer (part time) September 2018 – present

- Lead team that developed sensor to be installed in Stanford's dumpsters to accrue data about disposal schedule, dormitory waste disposal trends, evidence of contamination.
- Worked with Particle's mesh network devices and Walabot's 3D imaging sensor
- Developed frontend & backend of web portal using Django and Vue.js
- Profiled in:  $\frac{news.stanford.edu/2019/07/11/students-develop-technology-measures-dumpster-usage/$

Two Six Labs, Arlington VA

VC-Backed: Dell, Harbert, NAV,

Grotech

Software Engineer (full time) June 2019 to September 2019

- Worked on DARPA-funded, multi-tier, scalable application for the U.S. Government
- Worked with Tornado and Vue.js frameworks; Developed test automation architecture
- Wrote production code and gained thorough experience with complex design patterns
- Developed UI to modularly integrate instructions for schematic components

23andMe, Mountain View, CA

VC-Backed: Sequoia, GV, Mohr Davidow, Sapphire Software Engineer (part time school year; full time summer) February 2017 to October 2017

- Worked on confidential project with Agile team; wrote groundwork for backend API requests and developed testing and automation infrastructure
- Worked with Django, ReactJS, Facebook & Twitter APIs, and PIL and D3.js libraries
- Wrote production code and developed entire web application in last three weeks
- Contact <u>mikep@23andme.com</u> for specific details or questions

Cloudistics, Reston, VA

VC-Backed: Bain Capital

Software Engineer (full time)

June 2015 to August 2015; June 2016 to September 2016

- Developed hardware statistics gathering software and internal company website from scratch using Django and Angular to make user data more accessible for customer support, sales, QA, and the engineering team
- Developed API for SaaS portal; wrote python scripts and learned how to efficiently parse and clean data
- Wrote production code developing web technologies and relational databases

Additional Proficiencies: JSON, SaaS, REST, Agile, Atlassian products, Linux, AJAX, Jenkins, OOP