Max Darling

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Education

Stanford University — **Stanford, CA**
- *B.S. in Computer Science* — *Graduation Summer 2021*
- GPA: 3.72/4.0
- Teaching Assistant, Intro to Computer Science (CS106A/B)
  - Taught weekly problem solving sections for groups of ~12 students
  - Held weekly office hours providing 1-on-1 Python and C++ help

Experience

Full Stack Developer Intern — **San Mateo, CA**
IXL Learning — *Summer 2020*
- Developed and pushed a core new feature to the IXL site with +35 million monthly active users
- Wrote extensive updates to existing APIs; refactored and improved several React components
- Successfully self-taught a wide range of technologies: React, Struts 2, JSP, Hibernate, SQL

Software Engineering Intern — **Santa Clara, CA**
SoundHound Inc. — *Summer 2019*
- Developed the "historical facts" flow for the Hound voice assistant (4.5 stars, +800 reviews on App Store)
- Created web scraping and data cleaning scripts in Python to gather historical fact data from the web

Data Science Intern — **Tokyo, Japan**
Mitsubishi Research Institute (TYO: 3636) — *Summer 2018*
- Built a pipeline for gathering labelled machine learning data using Amazon Mechanical Turk (MTurk)
- Worked in a team of 10 machine learning engineers to build and improve a chatbot to assist Japanese people during natural disasters and national emergencies.

Projects

Pintos — *Spring 2020*
From-scratch operating system written in C
- Created an OS on top of Pintos fork with fully functional virtual memory, concurrency, and file system
- Wrote interrupt routines, page fault handler, frame eviction and allocation algorithms, and many core syscalls
- Independently architected concurrency models for both virtual memory and parent-child processes.

Systems Research — *Fall 2019*
Quarter-long research project under Prof. Michael Bernstein
- Proposed the "adaptive hash table", which alters its internal configuration in response to real time changes in both usage patterns and characteristics of incoming data.
- Built a functioning prototype in modern C++. Conducted experiments; wrote an academic paper on the results.

Skills

Languages & Technologies
- Skilled in C++, Python.
- Familiar with C, Java, Javascript, React, Node.js
- Experienced with Git, Vim, LaTex,

Coursework
- *Systems*: operating systems, programming language design (Win '21)
- *Theory*: complexity theory, discrete mathematics, combinatorics (Spr '21)
- *AI:* AI principles, natural language processing, probability and statistics

More About Me

- **Japanese**: I'm conversationally fluent, and am continuing to pursue full fluency so that I might work in Japan one day.
- **Soccer**: I enjoy playing pick-up, watching the Premier League on weekends, and rooting for Liverpool.
- **Cooking**: I cook for fun. Also, I spent a summer working in a Japanese kitchen, and love trying peculiar dishes when travelling. Tried natto yet?
- **Philosophy of Mind**: I'm perplexed by consciousness and cherish myriad thought experiments (eg. Chinese room).