Jasmine Hou

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Education

University of Michigan, Ann Arbor Aug. 2022 – May 2025
B.S. in Computer Science *GPA: 4.00/4.00*

- Relevant Coursework: Data Structures & Algorithms, Microarchitecture, Discrete Mathematics, Linear Algebra

Experience

Software Engineer Intern Apr. 2023 – June 2023
TenaFe, Inc. *Campbell, CA*

- Increased routine maintenance efficiency by ∼300% through automating component testing tasks using Django and Python.
- Built a dashboard visualizing >1,000 Jenkins pipeline metrics using React and Tailwind CSS. Leveraged information gathered from graph trends to aid informed corporate decisions mitigating component failure.
- Led strategic overhaul of the company website to adapt a modernized aesthetic, integrating improved geolocation-specific features that resulted in increased regional engagement.

Team Member Sep. 2022 – Apr. 2023
Michigan Data Science Team *Ann Arbor, MI*

- Utilized PyTorch to train and validate a seq2seq German-to-English translation model.
- Tokenized raw sentences into tensors for NLP modeling with Spacy.

Chapter President Aug. 2020 – June 2022
Distributive Education Clubs of America (DECA) *San Jose, CA*

- Strategically project-managed 180+ competitors and 20+ faculty members/chaperones to coordinate chapter success at large-scale business conferences (>22,000 attendees), resulting in ∼40% of competitors placing in top 20 of respective events.
- Facilitated the chapter mentoring system which helped newer members learn extensive business curriculum by providing catered resources and role-play opportunities; achieved ∼88% member satisfaction rate.

Projects & Open Source

jasminehou.dev | *Next.js, TypeScript, Tailwind CSS* May 2023

- Built and launched a personal website using Next.js, Tailwind CSS, and Netlify.
- Leveraged Spotify's API to showcase real-time currently listening activity as well as top track metrics.

youtube-dl | *Python* Apr. 2023

- Contributed video extractor feature to open-source project youtube-dl (>122k stars on GitHub) enabling downloads of U.S. Senate hearings and recordings.

Mental Health/COVID-19 Data Analysis | *Python, NumPy, Scikit-Learn, Pandas, Seaborn, SciPy* Aug. 2021

- Investigated effects of COVID-19 on mental health indicators with a dataset of >2,600 Argentine college students.
- Built data visualizations using Seaborn & performed statistical significance testing using SciPy (t-test, ANOVA).

Criminal Justice & Racial Bias Modeling | *Python, Pandas, NumPy, Scikit-Learn, Matplotlib* Oct. 2021

- Trained ML models on the COMPAS dataset (e.g. KNN, Random Forest, SVM).
- Analyzed demographic bias in dataset using quantifiable metrics (e.g. group fairness, calibration).

Technical Skills

Languages: C++, Python, Java, JavaScript, TypeScript, HTML/CSS
Frameworks / Developer Tools: Django, React, Git, Next.js, Tailwind CSS, Visual Studio Code
Libraries: pandas, NumPy, Matplotlib, SciPy, bs4