Daniel Li

105 S. State St., Ann Arbor, MI 48109

+1 (203) 909-9286 | dejl@umich.edu | linkedin.com/in/dejl | github.com/DE-JL

Education

University of Michigan — August 2020 – May 2024
Computer Science (B.S.E.), Minor in Mathematics — *Ann Arbor, MI*

- **GPA:** 4.0/4.0
- **Coursework:** Advanced Algorithms, Computer Organization, Web Systems, Machine Learning, Discrete Mathematics, Combinatorics, Linear Algebra, Abstract Algebra, Calculus I–IV, Statistics

Experience

Software Engineering Intern — May 2023 – August 2023
Uber — *New York City, NY*

- Created an insights dashboard using React to standardize alert management for Uber's services
- Implemented a search index on alert SNR data to help engineers identify and silence noisy, inaccurate alerts
- Scored alert coverage of the 4 Golden Signals for 1,000+ services to improve observability

Software Engineering Intern — May 2022 – August 2022
nCino — *Wilmington, NC*

- Used Salesforce Lightning Web Components to develop statistic analysis tools for corporate banking
- Improved the UX design of the Salesforce spreadsheet platform used in financial credit analysis
- Used Google's Angular framework to maintain and upgrade existing company software packages

Projects

Miniature Search Engine | *Python: Flask, Jinja* — December 2022

- Designed an inverted index using a MapReduce pipeline for 3,000+ Wikipedia documents
- Used term and inverse document frequency with PageRank scores to rank search results for keyword queries
- Built a REST API for the back-end using Flask, implemented the front-end UI with Jinja

Machine Learning Dog Breed Classifier | *Python: PyTorch, scikit-learn* — November 2022

- Implemented a convolutional neural network using PyTorch to differentiate dog breeds from 10,000 dog images
- Achieved a 70% AUROC score on test data with 10 distinct dog breeds

Fast Euclidean Minimum Spanning Tree Algorithm | *C++* — December 2021

- Developed a grid-based linear partitioning algorithm to compute the MST for uniform-distributed points in a plane
- Implemented a branch and bound algorithm to compute an optimal solution to the Traveling Salesman Problem

Research

Lab of Geometry Student Researcher — January 2023 – April 2023
University of Michigan — *Ann Arbor, MI*

- https://tinyurl.com/quotient-rings
- Studied an open problem in polynomial ring theory with a postdoc in the math department
- Presented findings at weekly seminars with other student researchers

Research Intern — September 2019 – March 2020
Sacred Heart University — *Fairfield, CT*

- Examined the structures of various molecular compounds to medicate alcohol poisoning
- Developed an effective molecular prototype for treatment via stochastic computer simulations with VEGA ZZ
- Presented and placed 1st in engineering projects at the 2020 Connecticut STEM Fair

Technical Skills

Languages: C, C++, Python, Golang, React, JavaScript, Typescript, MATLAB, LaTeX

Developer Tools: Git, VS Code, Vim, Visual Studio, AWS, Salesforce