

# DANIEL LIAN

McLean, VA ◇ daniellian238@gmail.com ◇ LinkedIn ◇ GitHub ◇ Website ◇ (571) 491-7190

Highly motivated computer science student with experience in scalable systems, machine learning models, and analytical problem solving. Enthusiastic to contribute to large-scale systems and make tangible impacts.

## EDUCATION

### University of Michigan

BS - Computer Science | GPA: 3.77/4.00

Expected May 2026

Ann Arbor, MI

- **Coursework:** Data Structures and Algorithms, Intro Data Science, Intro to Artificial Intelligence, Discrete Math, Programming & Data Structures, Intro to Computer Security, Intro to Operating Systems, Intro to Computer Organization, Foundations of Computer Science, Intro to Computational Linguistics, Intro to Cryptography, Ethics and AI, Software Design & Data Structures, Computer Science and Problem Solving

## SKILLS & CERTIFICATIONS

### AI/ML & Data Science

#### Languages

Python, R, Jupyter Notebook, Pytorch, TensorFlow, Pandas, NumPy, scikit-learn

#### Tools & Platforms

Java, C/C++, HTML, CSS, JavaScript, SQL, MATLAB, LaTeX, Julia, x86 ASM

#### Certifications

VSCode, Git, MariaDB/MySQL, Linux

Amazon Certified Solutions Architect Associate

## LEADERSHIP & ACTIVITIES

**Extracurricular Activities:** Michigan Quizbowl, WolvSec Cybersecurity, 3D Printing Club, Asian Intervarsity

### University of Pennsylvania Wharton Data Science Academy

Wharton Global Youth Program

Summer 2022

Philadelphia, PA

- Trained neural networks on large text dataset to determine star ratings of Yelp reviews in R, gaining practical experience in Natural Language Processing (NLP) and model interpretation
- Built and analyzed datasets with R to assess company market caps and stock performance relative to the S&P 500
- Collaborated with a team to develop a predictive model for real-world stock price changes from insider trading

## PROJECTS

### Cities Chain Discord Bot

July 2023 - Present

- Designed and implemented a scalable Discord game supporting thousands of players across 200+ Discord servers using efficient SQL backend data management in MariaDB for seamless gameplay
- Applied Agile software maintenance principles and used player feedback to ensure robust gameplay experience

### Election Prediction Algorithm

Aug 2022 - May 2023

- Implemented Python Tensorflow model in Jupyter Notebook to predict 85% of 2022 United States congressional winners using weighted average of 538 polls, demonstrating robust predictive analytics capabilities
- Presented research and findings to audience of 40 at tjSTAR technology research symposium

### Quizbowl Question Reader

Jan 2022 - Dec 2022

- Constructed Quiz bowl study tool using efficient data structures for rapid access to a 5000+ question database, allowing for personalized statistics and improved studying methods and efficiency

## EXPERIENCE

### Instructor

Fairfax Collegiate, LLC

Summer 2023-2025

McLean, VA

- Instructed various STEM classes to students over 15 weeks, teaching student of various ages robotics, basic programming skills, advanced math concepts including middle school math and algebra, fundamentals of game design
- Honed communication skills by mentoring junior staff, created friendlier team-based learning environment to adapt to students' diverse learning styles

### Lead Developer

Stealth AI Startup

Summer 2025

McLean, VA

- Created Agentic AI utilizing GMail's API using a Python Naive Bayes classifier to categorize 4000 emails per minute, leading to a drastic 10000% speedup in productivity through automatic mail organization and spam detection
- Deployed online Flask webapp for model availability and login through Google