Last Updated on 20th June 2025

DANIEL LIAN

McLean, VA ◇ daniellian238@gmail.com ◇ LinkedIn ◇ GitHub ◇ (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 — Expected May 2026
BS - Computer Science | GPA: 3.77/4.00 — *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	Python, R, Jupyter Notebook, Pytorch, TensorFlow, Pandas, NumPy, scikit-learn
Languages	Java, C/C++, HTML, CSS, JavaScript, SQL, MATLAB, LaTex, Julia, x86 ASM
Tools & Platforms	VSCode, Git, MariaDB/MySQL, Linux

LEADERSHIP & ACTIVITIES

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

University of Pennsylvania Wharton Data Science Academy — Summer 2022
Wharton Global Youth Program — *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

QR Code Generator — Dec 2020 - Mar 2021

- Developed QR Code Generator to deepen understanding of Reed-Solomon codes, error correction, and Galois Fields, showcasing foundational computer science principles for data integrity and system robustness

EXPERIENCE

Instructor — Summer 2023/2024/2025
Fairfax Collegiate, LLC — *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