Kevin Chong

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Education

University of Maryland, College Park

B.S. in Computer Science-Machine Learning Track, Minor in Mathematics

GPA: **3.93 / 4.00** Expected Graduation: **May 2026**

Awards: Dean's List, President's Scholarship

Courses: Algorithms, Organization of Programming Languages, Intro to Data Science, Computer Vision, Linear Algebra, Introduction to Probability Theory, Physics, Computer Systems, Discrete Structures, Multivariable Calculus

Languages: Python, Java, C, C++, Assembly (MIPS), Ocaml, Rust, JavaScript, HTML, CSS, SQL, MATLAB

Frameworks/Libraries: Selenium, PyTorch, scikit-learn, Pandas, NumPy, OpenCV, Django, Flask

Tools: Git, UNIX-based operating systems (including Linux), AWS (Lambda, S3)

Work Experience

• Software Engineering Intern

Visalaw.ai, May 2024 – August 2024

- Developed a data scraping tool using Selenium for web browsing automation and Scrapy for web crawling, reducing data entry time from days to under an hour.
- Created a data pipeline which stored information about dozens of legal documents in a SQL database. Used Pandas for data preprocessing and building feature columns.
- o Currently in a part-time consultant role advising on regression testing with Cypress and the scheduling of data mining tasks by leveraging AWS services like S3 and Lambda.

• Instructor

Fairfax Collegiate, June 2023 – August 2023

- o Taught variety of courses at summer camp including Drone Flying, SAT Prep, and 3D-Printing.
- Developed a programming curriculum that was integrated into the organization's syllabus for the Drones class.

• Head Teacher's Assistant

Fairfax Collegiate, June 2022 – August 2022

- o In charge of the distribution and stocking of materials for the Chantilly summer camp location.
- Acted as an assistant to the Location Director. Primary substitute for absent teachers. Accommodated the needs of campers and their guardians.

Projects

- **GDPredictor** (Keras, scikit-learn, Pandas)
 - o Used World Bank API to query for, then preprocess World Development Indicators (WDI) data.
 - Implemented feature selection techniques such as random forests to refine the dataset and reduce dimensionality.
 - o Compared the performance of several classification algorithms including SVMs and KNN in determining whether a country's economy would grow or shrink, with an accuracy of 85-90%.
- CourseLLM (Llama3, Hugging Face, Chroma, LangChain)
 - Made requests to UMD API for information on courses offered at the University of Maryland, storing the data using Chroma.
 - Deployed a Llama 3 LLM from the Hugging Face platform. Built a Retrieval-Augmented Generation (RAG) Model with LangChain Framework.
- **Drone Path-Planning and Object Detection** (OpenCV, NumPy)
 - Utilized YOLOv4-Tiny CNN to detect and identify objects of interest in drone camera feed.
 - o Employed a Kalman Filter to help the computer predict the movement of a target of interest, planning drone's flight path accordingly.

Activities

- Maryland Unmanned Aerial Systems (MUAS)
- Volunteer CS Instructor for students with Autism Spectrum Disorder (ASD)