

# ALAN GUO

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## EDUCATION

**Northwestern University**, Evanston, IL

**Expected June 2026**

*Bachelor of Arts, Major in Computer Science and Economics, Minor in Data Science*

- Relevant Coursework: Fundamentals of Computer Programming, Data Structures, Computer Systems, Intro to AI, Data Visualization, Data Science with Python, Mathematical Fundamentals of Programming, Computer Graphics
- Cumulative GPA: 3.7/4.0 | Technological Fraternity KTP

## RELEVANT EXPERIENCE

**Ridge Security**, Milpitas, CA

**June 2024 – August 2024**

*Software Engineer Intern*

- Programmed plugins for CVE vulnerabilities, enabling Ridgebot to detect risks with 100% detection rate across 500+ server endpoints by utilizing Docker for target simulations and implementing POCs for scanning and exploitation
- Integrated the API integration pathway between RidgeBot and PurpleRidge to fully operationalize the automated online penetrative testing solution for clients, opening a revenue stream valued at six figures using Docker and Django
- Designed the RidgeCompass portal, enabling users to customize vulnerability reports online leveraging Flask and AWS

**NU DISC (Develop + Innovate for Social Change)**, Evanston, IL

**January 2024 – June 2024**

*Software Engineer*

- Fixed a Chrome extension for nonprofit organization Kids in Danger, working with AWS and fullstack development with Flask, BeautifulSoup, and SBERT to display recall data on over 10,000 Amazon products for thousands of consumers
- Reduced database fetching by 10+ seconds for API calls by reworking the algorithm for product and recall matching
- Collaborated on Figma mockups and produced prototypes with alternative frameworks including Node.JS

**Northwestern**, Evanston, IL

**September 2023 – June 2024**

*Peer Mentor*

- Assisted professor in CS 110 Introductory Programming by helping with grading, answering questions, and holding office hours for class of over 200 students over 15 assignments and quizzes throughout the quarter
- Led weekly discussion section with 20 students going over self-made programming questions to help them prepare for quizzes and homework and communicated progress of students with professor and TA's in weekly meetings

## PROJECTS

**Baseball Pitching Analysis** – *Rstudio, Ggplot*

**March 2024**

- Generated graphics with GgPlot depicting pitch data in various mediums using large data from BaseballSavant database to find conclusions of pitching patterns from MLB players, cross-referencing through innings and seasons

**Stock Market Web App** – *Python, Dash, Sklearn*

**January 2023 – April 2023**

- Built a live-updating webapp using Dash that combines frontend and backend to plot various graphs based on different stock market variables, and predict future stock expectations training on a user-picked time constraints using Sklearn

**SQL Environment** – *C, C++*

**January 2023 – April 2023**

- Programmed a fully functional SQL environment using C and C++ as part of CS 211 class, handling user input and text files, queries, and edge cases. Deals with memory allocation accordingly so the program never crashes

**Instacart Accessibility Chrome Extension** - *Javascript*

**May 2020 – July 2020**

- Designed a chrome extension to help seniors navigate through websites like Instacart by guiding them through the purchasing process, conducting market research by interviewing 10+ seniors and achieving over 80+ survey responses
- Underwent the entrepreneurial process from mockups to logistics, evaluating viability and achievability of 5+ products, presenting many times throughout the design process, meeting with peer advisors and mentors to get feedback

## SKILLS & INTERESTS

Languages: Python, HTML/CSS/Javascript, Typescript, C, C++, Java, R, GLSL, PHP

Technologies/Frameworks: Flask, Dash, Node.JS, React, Linux, Docker, Jira, Bootstrap, AWS, Git, Sklearn

Additional Interests: Tennis, Guitar, Piano, Language Learning, Running