

Erica Chang

📍 McLean, VA ✉ ericachang1234@gmail.com ☎ (571)355-2447 in erica-chang-2021

Education

Virginia Polytechnic Institute and State University

BS in Computer Science

Aug 2021 – Dec 2024

Blacksburg, VA

- **Coursework:** Software Engineering Capstone, Data and Algorithm Analysis, Mobile Software Development

Experience

Booz Allen Hamilton

Summer Games Intern

June 2024 – Aug 2024

McLean, VA

- Designed and developed an AI software solution to assist the U.S Government in accelerating vehicle maintenance
- Earned a top 5 finalist spot out of 38 intern teams nationwide to present our project to the company's C-suite
- Developed a full-stack web application integrating a machine learning model and an interactive dashboard
- Conducted feature engineering to enhance model performance, eliminating 80% of model errors and saving ~\$500k yearly
- Optimized the ML model using AWS, enabling scalable and efficient real-time data processing for future government use

U.S Department of Homeland Security

Cybersecurity Intern

July 2022 – Sept 2022

Remote

- Served under the Chief Data Office Directorate (CDOD) to create a Data Sharing Agreement Policy to protect data
- Collaborated on a team of 5 to redesign an internal webpage, implementing low-maintenance, user-friendly solutions
- Researched the future implementation process of zero-trust architecture and its data protection importance
- Applied UX/CX design principles and plain language techniques to improve policy documentation and cybersecurity

Leadership

HackViolet Hackathon Virginia Tech

Technology Chair

May 2023 - April 2024

Blacksburg, VA

- Managed and optimized the technology for a Major League Hacking-partnered hackathon averaging 500+ participants
- Designed and managed a Discord server enhancing participant communication, mentor access, and event coordination

Society of Asian Scientists and Engineers

Secretary

May 2023 - April 2024

Blacksburg, VA

- Managed the SASE listserv, ensuring outreach to 100+ members about development and networking opportunities
- Streamlined weekly emails, increasing attendance at organization-led workshops, career panels, and social events

Projects

HokieGradTrack

Aug 2024 - Dec 2024

- Utilized agile methodology and developed a web application to streamline the tracking of graduate students' progress, improving the VT CS department's efficiency, enhancing student satisfaction, and reducing administration burden
- Tools Used: MySQL, API Endpoint, React, Node

MentorshipHub

Aug 2024 - Dec 2024

- Developed a desktop application to streamline the mentor-mentee matching programs of VT CAMEO to explore club events and student profiles based on academic and professional backgrounds
- Tools Used: MySQL, Python, Tkinter

Hearty Hokies

Feb 2022

- Developed a desktop application to improve student health at Virginia Tech through providing nutrition resources
- Tools Used: HTML, JavaScript, CSS, Replit

Technologies

Languages: Java, HTML, JavaScript, CSS, Python, C, Kotlin, SQL

Technologies: VSCode, Eclipse, Git, Android Studio, Jupyter Notebook

Libraries and Frameworks: Numpy, Matplotlib, Scikit-Learn, Pandas, React