

Victoria Chen

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EDUCATION

Texas A&M University – College Station, TX

August 2021 – May 2025

Bachelor of Science, Computer Engineering, GPA 3.93

EXPERIENCE

Software Engineering Intern | Raytheon Intelligence and Space

May 2023 – August 2023

- Develop a buffer management feature in C++ for an air moving target indicator (MTI) radar, improving real-time performance and resource use with dynamic mode detection, **increasing the number of channels by 25%** and resulting in a **76% increase** in the number of buffers for allocation.
- Optimize the performance of the software by analyzing and refining algorithms, resulting in enhanced speed.
- Conduct thorough testing and debugging through processor-in-the-loop (PIL) simulation, emulating real-time radar systems, to ensure the accuracy, reliability, and performance of real-time radar data processing.

HPC Student Technician | Texas A&M High Performance Research & Computing Center

February 2023 – Present

- Provide technical support and advice to users of the HPC cluster, through a **Linux CLI** including assisting users with job submission, queue management, and parallel computing techniques, ensuring efficient utilization of HPC resources.
- Design and develop a job dashboard using **Ruby, JavaScript, and React.js**, providing an intuitive interface for users to submit batch files and monitor job progress.

Data Science Undergraduate Research Assistant | Texas A&M NeuroErgonomics Laboratory

January 2023 – June 2023

- Utilize **Python** to create a comprehensive pipeline with complex mathematical models to interpret eye-tracking data.
- Analyze data to identify gaze patterns, fixations, and saccades, and quantified visual attention metrics, resulting in improved understanding of human interaction with autonomous vehicles.

PROJECTS

SASE TAMU | sasetamu.org | React.js, Next.js, MongoDB Atlas, TypeScript

- Developed a fully responsive website for a student organization, the Society of Asian Scientists and Engineers, with a cloud database system, using MongoDB Atlas to store and display member participation and points.

Seatr (The Solution to Airline Boarding) | seatr.vercel.app | React.js, Next.js, MongoDB Atlas, JavaScript

- Designed during a 24-hour hackathon, Seatr is a web app utilizing algorithms to ensure optimal seating arrangements to minimize boarding time and prioritize passenger preferences.

LEADERSHIP

President | Society of Asian Scientists and Engineers

April 2023 - Present

- Lead and guide a diverse membership of over **150+ active individuals**, fostering an inclusive environment and promoting multicultural involvement within an organization dedicated to service and professional development.
- Preside over weekly board meetings to facilitate productive discussions and collaborate with board members to ensure organizational transparency and align plans with organizational goals and pillars.

Logistics Organizer | TAMU Datathon

December 2022 - Present

- Manage sponsorship and event operations for TAMU Datathon, a data science hackathon with **over 200+ participants**.
- Demonstrate strong leadership skills in managing and coordinating all aspects of the event, including **company sponsorship, event operations, finance, and catering**.

TECHNICAL SKILLS

Languages: C++ | C | Python | JavaScript | Typescript | Verilog

Frameworks and Libraries: Node.js | Next.js | React.js | MongoDB | Numpy | Pandas | Matplotlib

Tools: Git | Linux | Docker | MongoDB Atlas