

Education

University of Washington

Seattle, Washington

Expected Grad. June 2025

- Bachelor of Science in Computer Engineering
- Notable Coursework: Matrix Algebra with Applications, Foundations of Computing I, The Hardware/Software Interface, Intro to Technical Communication, Intro to Computer Programming III, System and Software Tools.

Experience

Cartogram Software Engineering Intern

June – August 2021

- Hired to be a full-time software engineering intern for an indoor mapping company working to make traversing unfamiliar indoor locations easier by using Bluetooth beacons and software to create GPS-like interfaces that will guide users to internal locations.
- Worked on solving location drifting—when a user’s location would become inaccurate over time; added smart movement checking (determining if user is standing still/walking/running), boosting accuracy by as much as 70%.

Husky Robotics Software Engineer

September 2023 – Present

- Selected to be on the Software Team of Husky Robotics, one of the chosen 6 out of ~100 applicants.
- Responsible for developing **Unity** software for the virtual simulator used for testing mars rovers and integrating functionality into our website (made with **React**), displaying critical information about the robot for drivers to use while in competition and testing.

FIRST Robotics (Jr. FLL, FLL, FTC, FRC)

September 2012 – June 2023

- Actively participated in FIRST WA robotics since the 2nd grade. Became increasingly proficient with multiple departments of robotics (software, engineering, documentation, communication).
- Titan Robotics Club (High School team, participates in FIRST challenges) *August 2019 – June 2023 (750+ hours)*
 - ✓ Software Lead (2021–2023): Led groups of 10-14 programmers per year in perfecting our robot’s capabilities, helped more than 15 new members become acclimated to the FIRST program, created brand new projects to control and interface with retired robots, documented algorithms and won awards for software.
 - ✓ Software Team (2019–2023): Developed **Java** programming skills, learned a separate team library, created subsystem diagnostic **unit tests**, notated routines, aided with extensive fine-tuning.
 - ✓ Drive Team Coach (2021–2023): Communicated and led 4 other drive team members, who operate the robot during competitions, held practices up to 3 times a week for 2+ hours and strategy meetings with over a hundred other teams.

TEXTILE (Tutorials for EXperimentalist Interactive LEarning)

June – August 2022

- Selected to be in the UW ChemE Disease Directed Lab (Nance Lab, PI: Elizabeth Nance) **Data Science Training Program**.
- Learned **Python**, data management, experimental design, and **image processing** alongside observing wet-lab techniques such as brain slicing and microscopy. Applied image processing and **machine learning** techniques to fluorescent brain cell images.
- Engaged in research skill workshops including how to read research papers, DEI and Ethics in Data Science Applied to Neuroscience, and career planning.

School PTSA Webmaster

September 2021 – June 2022

- Setup membership purchase and reporting, updated site content and calendar, solved user and technical problems.
- A weekly commitment, with occasional emergency problems that required attention or urgent update requests.

CS Wonders Java Teacher’s Assistant

June – August 2020

- Assisted the instructor **teach Java** in various levels.
- Required to: attend weekly TA meetings, prepare for bi-weekly classes by completing lessons and projects, lead discussions in groups of 5-7, assist students with assignments, and review and grade student work.

Projects

SafeScroll Chrome Extension

October 2023

- Extension that automatically blurs sensitive and potentially triggering content, including text and images.
- **Won** at UW’s DubHacks Annual Hackathon out of **600+ contestants** for creative concept/name.
- Used **HTML**, **Tailwind CSS**, **JS**, and **JSON** for the extension & website, trained a **ML model** with **Python**.

Awards & Honors

Titan Robotics Club: Varsity Letter (2019–2023) / Rookie-All Star, Mentor’s Award (2020) / Rising Star Award (2021) / Engineering Inspiration (2022–2023)

International School: Math Honor Society-(Mu Alpha Theta) (2019–2023) / Music Honor Society-(Tri-M) (2020–2023) / National Honor Society (2021–2023) / Science National Honor Society (2021–2023) / National Technical Honor Society (2022–2023)

Skills

- **Software:** Java, Git, HTML, CSS, React.js, C++, C, C# (*Microsoft Cert.*), Linux, Vim, LaTeX, x86 Assembly, Python, OpenCV
- **Autodesk:** Inventor/Fusion 360, Maya, Synthesis
- **Hardware:** Wiring tools, Basic power tools