Julia (Jules) Hunter

Carnation, WA | (858) 860-9071 | jhunter2@seattleu.edu | linkedin.com/in/hunterjules | hunterjules.github.io

---

EDUCATION

Bachelor of Science, Computer Science and Mathematics **Sep. 2021 – Expected Jun. 2025**
Seattle University

- Double major, GPA 3.61
- Related coursework: data structures, algorithms, databases, object-oriented programming, computer networks, computer graphics, calculus, linear algebra, differential equations, Fourier analysis, mechanics

Study Abroad **Apr. 2023 – Jul. 2023**
Sophia University, Japan

- Studied intercultural communications, focused on Chinese and Japanese history.

WORK EXPERIENCE & PROJECTS

Seattle University, Research Assistant **Sep. 2024 – Present**

- Simulating electrical activity in neurons using an Adaptive Exponential Integrate and Fire model and simulation-based inference (SBI) to replicate the bursting frequencies of neurons at select amplitudes of injected current presented in the paper by Goddard Et al. (DOI 10.1016/j.neuron.2011.11.028).
- Serving as an undergraduate researcher under Dr. Brian Fischer, assisting with developing and testing code for statistical inference.
- Developed and tested two functions to calculate summary statistics, worked collaboratively to write code for a neural posterior estimation using an MLP neural network, and wrote a report and presentation tailored to non-experts on the process we used to achieve results.
- Coding in Python (matplotlib, scikit-learn, numpy, sbi) with Jupyter Notebook, implementing machine learning (clustering algorithms), simulation-based inference, and data visualization.

Kilowatts for Humanity, Seattle University Capstone Project, Software Engineer

- Building a web application that models business cases for sustainable off-grid electrical systems in developing countries.
- Developer on a team of 4 working on the backend application net energy calculation scripts and data storage.
- Implemented the basic application that allows a user to upload a CSV file containing irradiance, temperature, wind, diesel, and load data, and generates a graph of the net energy.
- Coding in JavaScript using React for the frontend and in Python using a Flask app for the backend, using Visual Studio for development and GitHub for version control.

Seattle University, Math Tutor **Sep. 2023 – Present**

- Tutoring students in various undergraduate math courses, including calculus, linear algebra, probability, and differential equations.
- Member of a team of 6-8 people working throughout the school week to staff the Math Lab for drop-in tutoring.
- Solved problems and explained solutions to around 40 students per month and encouraged their academic progress.
- Practiced technical communication, leadership, and adaptability.

SKILLS

Programming Languages: Python, C++, MySQL, JavaScript, HTML, CSS, R, F#, OpenGL
Tools: GitHub and Git, Microsoft OS/Microsoft 365 (Word, Excel, PowerPoint, Outlook), React, Flask, Node.js, Azure, Visual Studio, LaTeX, ChatGPT, Mathematica, Figma, MATLAB, Google Docs, ArcGIS Online, Firebase (NOSQL database)
Concepts: Full Stack Development, Agile Development, Databases, Unit Testing, Web Development, pair programming, code reviews
Soft Skills: Technical communication**,** teamwork, professionalism, adaptability, problem-solving, time management, planning, academic writing
Foreign Languages: Mandarin Chinese (HSK 3 Cert Aug 2024, Confucius Institute of the State of Washington)