Jules Hunter

Software Engineer

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EDUCATION

Bachelor of Science, Mathematics and Computer Science **Sep 2021 – Expected Jun 2025**
Seattle University, Double major, GPA 3.6

RELEVANT COURSEWORK

- **Object-oriented Design:** Dependency injection, inheritance, polymorphism, encapsulation, class design, unit testing
- **Databases:** Relational database design, data modeling and schema design, normalization
- **Computer Networking:** Network architecture, internetworking, congestion management, CDN, DNS
- **Data Structures:** Binary search trees, priority queues, hash tables, heaps, big-O, recursion, sorting algorithms

EMPLOYMENT & VOLUNTEERING

Software Engineer, KiloWatts for Humanity *Sep 2024 – Present*

- 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

Research Assistant in Computational Neuroscience, Seattle University *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.
- Serving as an undergraduate researcher 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.

Undergraduate Math Tutor, Seattle University *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.

Teaching Aide in Math for K-8 Teachers, Seattle University *Jan 2023 – Apr 2023*
Elementary Math Tutor, SUM Corps at Bailey Gatzert Elementary School *Sep 2022 – Dec 2022*
Barista, Starbucks *Jun 2022 – Sep 2022*
Aerial Acrobatics Instructor, San Diego UNITED Training Center *Jun 2017 – Apr 2020*

SKILLS

Programming Languages: Python, MySQL, HTML, JavaScript, CSS, C++, F#
Tools: GitHub and Git, Microsoft OS/Microsoft 365 (Word, Excel, PowerPoint, Outlook), React, Flask, Node.js, Visual Studio, LaTeX, Mathematica, MATLAB, ArcGIS Online, Google Firebase (NOSQL database), ChatGPT
Concepts: Full Stack Development, Agile 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)