masonmenser.com
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# Mason Menser

(425) 435-7029
Seattle WA

## Education

| Pullman, WA | Washington State University | Fall 2022 – Spring 2026 |
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- B.S. Computer Science, Minor in History & Mathematics - Expected Graduation May 2026 - 3.77 GPA
- Recipient of WSU University Achievement Award and John W. and Anna M. Scott Fund for Academic Excellence scholarship.
- Coursework: Systems Programming; Databases; Algorithms; Data Structures; Computer Architecture; Software Engineering; Calculus III.

## Experience

| Founder | MashWiki | June 2025 – Present |
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- Built and deployed a full-stack web application that recommends Wikipedia articles through semantic search, processing and indexing 100,000+ articles using text embeddings and cosine similarity.
- Designed and implemented a Node.js and PostgreSQL backend deployed on AWS EC2, scaling to 100+ registered users within two weeks of launch.
- Developed a responsive React Native frontend with dynamic content retrieval and real-time recommendation algorithms.

| Firmware Research Assistant | WSU | August 2024 - Present |
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- Design, implement, and deploy a heat-controlled enclosure for agricultural research using Raspberry Pi, Arduino, LoRa wireless modules, thermocouples.
- Develop a control algorithm in C++ to modulate a voltage transformer with stepper motors based on real-time temperature readings.
- Built a React + Flask web dashboard hosted on Raspberry Pi 4 with Nginx for remote monitoring and wireless communication with the control systems.

| IT Operations Intern | PACCAR Parts | May 2025 - August 2025 |
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- Implemented a 3rd-party SaaS cloud printing application, allowing for native iOS printing and saving over $50,000 annually from more efficient and quicker printing.
- Wrote Powershell & Python scripts to automate the IT auditing of departments, reducing manual labor time by 30 minutes.
- Monitored IT systems and processes of over 500 employees to ensure compliance with security standards and best practices.

## Projects

- **Personal Portfolio Site:** Built with React and Tailwind CSS to showcase projects, skills, and career goals. Featuring a dynamically generated nature background and typewriter text effects.
- **C# Spreadsheet:** A fully-functioning spreadsheet application, similar to Excel. Featuring formulas, expression evaluation, references, error-checking, undo/redo, customization, multiple variable support, saving and loading to XML, and more! Built in C#.

## Languages and Technologies

- **Programming:** C++, C, Python, C#, SQL, TypeScript
- **Frameworks:** React, Express, Flask, React Native, HTML/CSS
- **Technologies:** UART, I2C, SPI, Arduino IDE, Raspbian, Git, GitHub, Linux, VS, VS Code, PostgreSQL