Jeremy Freiburger

jeremyfr@cs.washington.edu · 206-631-9890 · github.com/JeremyFreiburger

Education

University of Washington — Seattle, WA
BS Computer Science *GPA: 3.81* — Sept. 2021 - June 2025
Relevant Coursework: Data Structures, Algorithms, Software Design, Hardware Software Interface, Parallelisms and Concurrency, Computational Statistics, Data Management, Human-Computer Interaction, Artificial Intelligence, Cyber Security

Professional Experience

Sound Transit — Seattle, WA
Software Engineer Intern — June 2023 - Sept. 2023

- Demonstrated proficiency in Drupal 9, Docker, PHP, SCSS/HTML, Git, agile methodologies, and cybersecurity practices, contributing to an enhanced user experience on Sound Transit's website.
- Developed and implemented Bash script tests to identify and resolve triangular routing issues, improving server routing efficiency and reducing packet loss.
- Collaborated with a cross-functional agile team, using Git and Bitbucket for version control and following scrum practices to improve sprints velocity each period.
- Developed route capsule twig templates and integrated the "One Bus Away" API for accurate location information retrieval, resulting in real time updates.
- Followed the development to QA to production process on ensuring deployments pass automated Jenkins builds and smoke tests.

UW Eco-Physics Lab — Seattle, WA
Software Developer — Mar. 2023 - June 2023

- Contributed as an undergraduate member of a machine learning research team focused on developing a training model to detect honey eaters in Australian camera trap video frames.
- Utilized Python, TensorFlow, PyTorch, and Pandas to train the model using YOLOv8 object detection and bounding boxes.
- Collaborated with researchers on honey eater behavioral paper while sharing a common interest in environmental health.

UW Sensory, Energy, and Automation Laboratory — Seattle, WA
Software Developer — Jan. 2023 - Mar. 2023

- Member of ECoS team which developed a Google Doc extension web application that enables professors to efficiently revise technical papers, streamlining the editing process for increased productivity and accuracy.
- Developed a front-end web page in React with a search bar providing a list of results, streamlining data retrieval for user GUI.
- Followed best practices of creating feature branches, conducting code reviews, and resolving merge conflicts to ensure smooth integration of code changes into the main development branch.

Projects

Flight App (Java, MySQL, Azure, J-Unit)

- Utilized prepared statements to optimize query performance on a MySQL Azure database containing millions of records, including plane flights, users, and reservations.
- Implemented key features including user account creation, login authentication, flight search, and reservation booking with integrated payment processing. Implemented the SHA-1 hashing function with password salting for enhanced password security.

Skills/Certifications

Java, HTML/CSS/SCSS, Typescript, Python, C, C#, MySQL, LaTex, JavaScript, PHP, PostGreSQL, React, Node.js, Apache Spark, MongoDB, Jupyter Lab, Matplotlib, Docker, Jenkins, Tomcat, Drupal, Vue.js, Gitlab Jupyter Notebook, Git, Bitbucket, Agile, Figma
WA State Certified Behavioral Technician(Aug 2023)