Zachary Wu

206-483-6428 | zachary.h.wu@gmail.com | zachary-wu.com | www.linkedin.com/in/zachary-wu5 | github.com/wachzu

Education

University of Washington (GPA: 3.93/4.0)

Seattle, WA, U.S.A.

Jun 2027

Bachelor of Science in Informatics

Bachelor of Science in Applied and Computational Mathematical Sciences (Data Science and Statistics)

Roosevelt High School (GPA: 3.99/4.0 - 4.375 weighted)

1530 SAT Score - 760 EVBRW 770 Math

Seattle, WA, U.S.A. Sep. 2019 - Jun. 2023

Experience

Domecile

Product Management Intern

June 2025 - Present

Seattle, WA

• Conducted research on integration partners and organized key documentation to support strategic initiatives.

- Built and automated HTML forms to streamline lender questionnaires, collaborating with product, engineering, and data teams.
- Partnered with product, engineering, and data teams to support integration initiatives and ensure seamless implementation of internal tools.

Web Development Intern

March 2025 - Present

University of Washington Svoboda Diaries Project

Seattle, WA

- Performed comprehensive analysis of 19th-century Middle Eastern diaries through social network analysis, topic modeling and distant reading (**Python**), contributing to a data-driven understanding of historical contexts.
- Utilized Node.js, Sequel, JavaScript, HTML, and CSS to improve website performance and user experience.
- · Worked on extending the Rivermap site, adding functionality and increasing user accessibility.

Teaching Assistant - Java

Sep 2024 - Present

University of Washington Computer Science

. Seattle, WA

- Conducted quiz sections, held office hours, facilitated discussions and prepared lectures, teaching students Java fundamentals in UW's CSE 12X series.
- Prepared and maintained a web page for course materials, developed electronic bulletin boards and discussion sites and held regular
 office hours.
- Prepared test questions and assignments, proctored and scored exams and calculated overall grades.

Instructor Intern *Lavner Education*

Jun 2024 - Aug 2024

Seattle, WA

- Held and taught classes of students aged 8-15. Average class size was 10 students.
- · Instructed coding languages, including Python and Java, with a focus on data structures and algorithms.

Projects

SportsXcel - Full Stack Ecommerce Website | JavaScript, HTML, CSS, SQL, Node.js

- Developed a dynamic e-commerce website with JavaScript, HTML, and CSS, providing a responsive, user-friendly interface for an
 online shopping experience.
- Built and integrated a **Node.js** backend to handle API requests, enabling efficient data flow between client and server.
- Designed and implemented a database to manage inventory, user accounts, and transactions. Integrated the database with the website's front-end and back-end systems to support smooth operations.

Multifaceted Analysis of NBA Data using R and Social Network Analysis | R, Python

- Used **R** to clean, manipulate, and analyze NBA datasets, generating insights through visualizations and comparisons.
- Conducted Social Network Analysis in **Gephi** on player relationships and game flow, using network graphs to detect key playmakers and hidden team dynamics.

Huffman Code | Java

- Designed and implemented a Huffman coding algorithm to efficiently compress data, demonstrating abilities in data structures and algorithms
- Optimized data compression processes by developing custom implementations of the Huffman coding technique, resulting in a 30-70% decrease in file size.

Technical Skills

- Programming Languages: Java, Python, R, JavaScript, HTML, CSS, SQL.
- Frameworks: Node.js, JUnit,
- Developer Tools: Git, VS Code, IntelliJ, Jupyter Notebook, Gephi.
- Libraries: Pandas, NumPy, Matplotlib, ggplot2, React.