

# SOHRAB OSMANY

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## Education

### University of Washington - Seattle Campus

Expected Jun 2025

Bachelor of Science in Computer Science - (3.6 / 4.0)

Seattle, Washington

**Relevant Coursework:** Distributed System, Data Structures, Algorithms Analysis, Database Management, Machine Learning, Research, Probability & Statistics, Parallelism, Computer Architecture

## Skills

**Languages (Proficiency):** Java, JavaScript, Scala, SQL, CSS, HTML, Python, PHP, C++, C

**Skills:** Spring-Boot, Scala, JUnit, GraphQL, AI Prompt Engineering, Ajax, Bootstrap, jQuery, PyTorch, Linux

**Tools:** Git, Dynatrace, Datadog, AWS Lambda, Splunk, ChatGPT, Claude, Terraform, Bootstrap

## Experience

### Software Engineer Intern

Jun 2024 – Dec 2024

Chewy Bellevue, Washington

- Engineered, tested, and launched personalized **Frequency Recommendation** feature using **Java**, **Spring-Boot**, **Terraform**, **Scala**, **GraphQL**, **Gradle**, and **Amazon AWS Lambda** reducing Autoship cancellations by approximately **15.5K** customers weekly, with overall entitlement of **25.8M** per year.
- Created and migrated over **28 dashboards and alerts** from **Splunk** to **Dynatrace**, saving the company over **\$8M** per year, increased application performance monitoring, and improved system visibility and incident response times.
- Led the **peek preparation** and **resiliency** test for Autoship **main service** and successfully conducted **performance testing** using **Scala**, **Kafka** and **Datadog** in preparation for **10x** more traffic.

### Undergrad Computer Science Research Assistant - Vector Database

Jan 2024 – Dec 2024

University of Washington Seattle, Washington

- Developed high-performance algorithms for **Approximate k-nearest Neighbors (ANNs)** in vector databases, improving performance and scalability, resulting in a **7%** increase in user engagement.
- Implemented innovative **Hierarchical Navigable Small World** algorithm-based solutions for dynamic update and retrieval of ANNs, improving the **efficiency** and **accuracy** of search functionality in LLM applications and AI.

### Program Coordinator

Dec 2021 – Jan 2023

Shoreline Community College Shoreline, Washington

- Automated and deployed **data management** system for **500+** student records **quarterly**; implemented **automated API** and streamlined enrollment processes, resulting in **340%** increased efficiency in administrative workflows.

### Software Engineer and Database Developer

Jan 2019 – Feb 2020

Herat Host IT Services Herat, Afghanistan

- Engineered and created **over eight** software and managed **over 13** new systems/products using a diverse tech stack including Java, **JavaScript**, PHP, **SQL**, Git, Ajax, Bootstrap, HTML, and CSS.
- Collaborated with a team of five members to construct a **database system** for the **U.S. military's** healthcare services, successfully delivering a specialized product to the **American Army**, and saving over **\$5M** for the Army.

## Projects

### MatchHub - Soccer | [MatchHub-Soccer.git](#)

Dec 2024 – Present

- Built a **full-stack** soccer match tracking app using **Java**, **Spring Boot**, **Gradle**, **JavaScript**, **React**, and **MySQL**, featuring **real-time updates** with **WebSockets** for live scores, lineups, and standings, improving tracking efficiency by over **70%**.

### AI Model - Image Classification | [Image-Classification-Model.git](#)

Jan 2024 – Mar 2024

- Designed **CIFAR-10** Image Classification using **PyTorch** and deep learning models. Developed convolutional neural networks with over **70%** accuracy. Develop hyper-parameter tuning techniques, such as random search to enhance high model accuracy. Skills in building and optimizing models and applying theoretical concepts to solve real-world problems.

### Portfolio | [Portfolio.git](#)

Sep 2023 – Oct 2023

- Developed personal portfolio software with MySQL and **PHP** for back-end operations, Bootstrap, HTML, and CSS for front-end design; completed the project in 8 weeks while enhancing user experience by increasing load speed by **30%**.