Palbir Minhas

EDUCATION

University of Washington

June, 2024

BS in Computer Science and Engineering (Data Science Option)

Seattle, WA

Relevant courses: Foundations of Computing 1 and 2, Advanced Data Structures, Distributed Systems, Data Structure and Parallelism, The Hardware-Software Interface, Computer Vision, Systems Programming GPA: 3.58/4.0

EXPERIENCE

Software Engineer Intern | Paul G. Allen School

May 2022 - Present

- Contributed to Project Sidewalk, a web application that leverages crowdsourced data and machine learning to
 identify and visualize inaccessible sidewalks in cities. Implemented and improved the integration of Google Maps
 API in Scala for data processing in five international cities.
- Handled and processed data from over 10,000 sidewalk images and improved the accuracy of the project by 81.2%.
- Improved page loading speed by 67.8% through optimization using Google Street API, network traffic automation, and time-based task automation.
- Worked with a back-end architecture built with Scala, PostgreSQL, and Docker, and a front-end built with JavaScript and HTML.

Operations Assistant Intern | WHG Trucking

May 2016 – August 2020

• Involved in daily operational tasks including planning of freight, asset utilization, safety management, Department of Transportation (DOT) compliance, driver payroll, Customer Value Delivery, and logistics management/analysis.

Founder and Facilitator | Sikh Student Association of UW

August 2019 - Present

Established a student-based organization to educate both Sikhs and non-Sikhs on campus while promoting the main tenets of Sikhi. The goal is to create a safe space for students who identify as Sikh and/or want to learn about the Sikh faith. Hosted over 20 events and reached a community of over 500 students.

Teacher | Ranjeet Gatka Akhara

August 2018 - Present

Teach martial arts to kids from 5-24 years old and host events discussing social injustices, historical events, and raise money for poverty. The team also performs at events such as the Kent Cornucopia Festival Parade and the Kent and Renton city parades.

SOFTWARE PROJECTS

Campus Map

March 2022 - May 2022

- Designed abstract data types of Graph and implemented Dijkstra path-finding algorithm in Java.
- Using the MVC design pattern to create a web map application allowing users to navigate between UW buildings by showing a path on the map.

UMessage

December 2021 – February 2022

- Implemented data structures such as AVLTree, HashTable, and various sorting algorithms in Java.
- Built word suggestion, spelling correction, and auto-completion for uMessage (chatting software) based on the above implementations.

Personal Website

November 2021 – Present

- Designed, built from scratch, and maintain the website using JavaScript, HTML, CSS.
- Created an admin panel that manages all website contents and personal services such as a net-disk and VPN.

Technologies and Languages

Proficient: C, C++, Java, CSS, HTML **Exper**

Experienced: Python, LATEX, JavaScript, SQL, Racket, Ocaml

Familiar: Shell, Assembly, Bash

Technology: Git, Azure, Node.js, React