Rajveer Sodhi

+1 (778) 583-6645 | Kelowna, BC V1V 3C9 | raiveersodhi03@gmail.com | linkedin.com/in/raiveersodhi | github.com/raiveersodhi

Education

The University of British Columbia (UBC), Kelowna, BC

Sep 2021 - Apr 2026

B.Sc. Honours in Computer Science and Minor in Data Science - GPA: 4.33

Awards: Dean's List (2021W, 2022W), Deputy Vice Chancellor's Scholarship (2021W), CMPS Undergraduate Award Nomination (2021W)

Skills

Languages: Java, Python, R, C#, Kotlin, JavaScript, TypeScript

Tools: Unity, GitHub, Tableau, Power BI, Firebase, Android Studio, MySQL, MongoDB

Web Development: HTML, CSS, Tailwind CSS, Bootstrap, Flask, Next.js, React.js, Node.js, Express.js, Axios, Mongoose

Frameworks & Libraries: Pandas, Seaborn, MatPlotLib, NumPy, JUnit, PyTest, Keras, OpenCV, Selenium

Experience

Teaching Assistant / UBC Okanagan, Kelowna, BC

Jan 2024 - Apr 2024

- Delivered lab instruction and meticulously evaluated assignments for over 60 students in an introductory computer science course.
- Executed invigilation duties, supported lecture activities, assessed exams, and provided academic assistance to over 200 students.

Undergraduate Researcher / UBC Okanagan, Kelowna, BC

Sep 2023 - Present

- Conducted a study in Human-Computer Interaction (HCI) with over 20 participants to investigate the efficiency of cutting-edge command selection techniques using head-mounted displays, such as Hand-Proximate User Interface (HPUI) and gaze-tracked input.
- Explored the principles of In-Vehicle Infotainment Systems and built implementations of HPUI with C# and the Unity XR Toolkit.

Supplemental Learning Leader / UBC Okanagan, Kelowna, BC

Sep 2023 - Apr 2024

- Facilitated student comprehension in calculus courses by conducting review sessions and office hours, benefiting over 300 students.
- Collaborated with instructors, ensuring alignment of supplementary materials and maintaining an active online presence by promptly
 addressing student queries and sharing timely announcements for an engaging academic environment.

Website Administrator / Niteo Africa, Kelowna, BC

Sep 2023 - Present

- Administered Niteo Africa's WordPress-based website, incorporating blog posts and event information and diligently updating website
 plugins, resulting in a 150% increase in website viewership since assuming the role.
- Communicated concerns and insights to the Executive Director through detailed monthly reports to ensure regular progress.

Software Developer Intern / UBC Okanagan, Kelowna, BC

Sep 2023 - Dec 2023

- Spearheaded the development of a module within a graphical Decision Support System in Java for long-term degree planning, which is expected to help over 10,000 students plan courses and streamline discussions with academic advisors.
- Added support for over 120 complex degree configurations and used Google CP-SAT Solver to build an optimization model for an
 optimal plan, along with various code refactoring and improvements to the optimizer.

Projects

Portfolio Website / Next.js, Tailwind CSS, TypeScript

Apr 2024

- Created a personal website showcasing my technical skills, work experience, research, and more.
- Developed using the Next.js framework in TypeScript and styled with Tailwind CSS.

E-Learning Platform / Python, HTML, CSS, JavaScript

Apr 2024

- Collaborated in developing a Flask-based e-learning platform, employing Agile methodologies, CI/CD practices, UML for system
 design, and Test-Driven Development (TDD) with Selenium for automated testing and deployment to ensure quality and performance.
- Implemented core features like user authentication, course management, discussion portals, assignment submissions, and grading.

Sign Langauge to English Converter (Hackathon Winner) / Python, HTML, CSS, JavaScript

Jan 2024

- Led a cross-functional team in developing a full-stack website, using Node.js to translate American Sign Language into English, integrating a gesture-recognition machine learning model developed with Keras and OpenCV.
- Implemented the Google Translate and Text-to-Speech API to enhance the project's capabilities by generating multilingual text and speech outputs for the translations.

Ride-Sharing App Prototype / Java, XML

Dec 2023

- Engineered a high-fidelity prototype for a ride-sharing app in Android Studio, seamlessly integrating the Google Maps API.
- Applied HCI fundamentals by conducting multiple rounds of requirements gathering and user testing to refine the user experience.
- Utilized object-oriented principles to ensure efficient code organization, enhancing maintainability and scalability of the app.