

Ravil Bigvava

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EDUCATION

The University of British Columbia

Sep. 2019 – Aug. 2024

Bachelor of Science in Computer Science

Kelowna, BC

- Relevant Coursework: Computer Vision, Image Processing, Computer Graphics, Web Development, Software Engineering, Data Structures, Project Management, Database Management, Analysis of Algorithms, Data Analytics, Machine Architecture, Discrete Structures, Human-Computer Interaction, Matrix Algebra, Differential Equations, Calculus III & IV, Partial Differential Equations, Electricity & Magnetism, Thermodynamics, Electronics, Quantum Mechanics, Mechanics I

EXPERIENCE

Software Developer

Nov. 2024 – May 2025

Fuji Tsubame Co., Ltd.

Shizuoka, Japan (Remote)

- Designed and developed internal software solutions tailored to the needs of the oil industry.
- Built **Fujitsubame Finance**, a fully localized, offline-capable desktop application with a modular architecture using **Qt (QML & C++)**, **SQLite**, **QAbstractListModel**, and **QSettings**, for managing partner companies and contractual revenues.
 - * Fully localized, offline-capable, with a modular **QML/C++** architecture.
 - * Features include company and contract management, revenue modeling, CSV export, and settings configuration.
- Collaborated with stakeholders to gather requirements and deliver maintainable software aligned with business goals. Previously contributed to backend development using **Java**, **Spring Boot**, and **Hibernate**, as well as CI/CD automation with **Jenkins**.
- Co-developed **Tsubame Portal**, a web-based internal operations tool for contract tracking, reporting, and access control. Built the frontend using **Angular**, enhanced testing with **JUnit**, and supported system monitoring via **Datadog**.

Resident Advisor

Sep. 2021 – Apr. 2022

The University of British Columbia

Kelowna, BC

- Coordinated activities (attendance from 40-200+) in residence, fostering a community environment for first-year students
- Encouraged and ensured a positive, cooperative, and safe environment
- Monitored building and floor for damages and maintenance problems; responded to urgent situations
- Developed critical communication skills and leadership abilities

Peer Mentor

Sep. 2020 – Dec. 2020

The University of British Columbia

Kelowna, BC

- Mentored and provided support to peers in the university setting
- Facilitated communication and promoted positive interactions among mentees
- Developed strong mentoring and communication skills

Orientation Leader

Aug. 2020 – Sep. 2020

The University of British Columbia

Kelowna, BC

- Served as an orientation leader during the hybrid orientation program
- Engaged in community outreach, promoted diversity and inclusion, and demonstrated leadership

Chemical Lab Analyst

June 2019 – Aug. 2019

DRC Rubber Compounding

Sakarya, Turkiye

- Helped making rubber formulations in the lab

PROJECTS & RESEARCH

AIDE (AI-Integrated Development Platform)

May 13, 2024 – Aug. 12, 2024

- Collaborated in a team of 6 to develop **AIDE**, an innovative web platform using **React**, **JavaScript**, **Node.js**, **Express.js**, and **PostgreSQL** to streamline grading in web development courses and support student progress, as part of a capstone project.
- Integrated AI capabilities to deliver automated grading and personalized feedback for **HTML**, **CSS**, **JavaScript**, and web link submissions.
- Implemented secure multi-role access for instructors, teaching assistants, and administrators, with robust course and user management.
- Ensured consistent deployment using **Docker**, with automated workflows via **Drone CI**.
- Wrote unit and integration tests with **JEST** and **SuperTest**, and served static assets through **Nginx**. Maintained version control with **Git**.

Spacey's

Oct. 2023 – July 25, 2024

- **Spacey's (Stratospheric Polarization Analysis for Calculating Electromagnetic Yaw)** is one of the official teams for the **CAN-SBX 2023–2024 / Canadian Stratospheric Balloon Experiment Design Challenge**.
- Part of a team of 10 people with diverse skill sets participating in a high-altitude balloon experiment competition.
- Primary responsibilities involved **data analysis**, embedded software engineering, and sensor integration.
- Designed the **software architecture** for the **microcontroller (Raspberry Pi Pico)**, utilizing **Python**, and version-controlled using **Git**.
- Co-developed a **Mission Control Interface** using **Angular**, **Spring Boot**, and **SQL** to visualize and manage sensor data, flight logs, and experimental output. Employed **Jenkins** for CI/CD automation.
- Analyzed collected data, extracted insights, and developed algorithms for processing and visualizing the results. Simulated data pipelines and tested core components using lightweight CI/CD workflows and scripting tools.

JujutsuMech Rover

March 2024

- Submission for the SPEX (3rd place) - Space Week 2024 Rover Design Competition- Our rover design was meticulously crafted to conduct geological surveys, search for biosignatures, and document ancient riverbeds, all while investigating anomalies in Cydonia.
- It covered **system architecture**, **mechanical design**, electrical and power systems, science payload integration, and **communication systems** -ensuring a multifunctional rover suitable for geological and potential biological discoveries in the exploration of Mars.
- Led system architecture and mechanical design (chassis, locomotion, and aerial deployment subsystems); prototyped key subsystems in **C++** and conducted simulation and testing workflows with **Java** and **JUnit**.

VOLUNTEERING

Living Positive Resource Centre

Feb. 2023 – May. 2023

Social Services

Kelowna, BC

- Contributed to social services, reinforcing commitment to empathy, teamwork, and effective communication

Mindvisa India Program

July 2018

Social Services

South India

- Taught English to children in coastal villages, helped build eco-friendly classrooms
- Explored new cultures and perspectives during a 10-day program in Kerala, Tamil Nadu, and Pondicherry

HONORS & AWARDS

Department of Computer Science, Mathematics, Physics, and Statistics Funding

Feb. 2024

The University of British Columbia

Kelowna, BC

- The Spacey's project, competing in the CAN-SBX under SEDS Canada and the Canadian Space Agency, has received funding support from the Department of Computer Science, Mathematics, Physics, and Statistics, further demonstrating the department's commitment to advancing STEM education and fostering innovative projects.
- Bridging the gap between theoretical knowledge and practical application within the Department of Computer Science, Mathematics, Physics, and Statistics
- With a team primarily composed of members holding science degrees, the project offers valuable hands-on experience, fostering interdisciplinary collaboration among students from diverse backgrounds.

The Tuum Est Student Initiative Fund

Jan. 2024

The University of British Columbia

Kelowna, BC

- The Tuum Est Student Initiative Fund, initiated by the Associate Vice President of the Students portfolio at UBC's Okanagan campus, is dedicated to providing financial support for student-driven initiatives, conferences, and competitions.
- Serving as a catalyst for innovation and local engagement

Deputy Vice-Chancellor Scholarship for International Students

Jan. 2021

The University of British Columbia

Kelowna, BC

- Awarded to international students with a GPA higher than 80%

Karen McKellin International Leader of Tomorrow

July 2019

The University of British Columbia

Kelowna, BC

- This award recognizes exceptional prospective international undergraduate students who demonstrate superior academic achievement and exemplary leadership skills that support and empower others through collaboration, empathy and active listening.
- It recognizes students who have made a positive impact through their involvement in various school and community service projects and initiatives, and attained notable achievement in other academic or extra-curricular pursuits.
- It is renewed annually. Recipients of this prestigious scholarship are granted a full-ride financial package annually, ensuring their continued success in pursuing their academic and leadership endeavors.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (Postgres, SQLite), JavaScript, TypeScript, HTML/CSS, R, MATLAB

Frameworks & Tools: React.js, Angular, Node.js, Express.js, Spring Boot, Hibernate, Docker, Drone CI, Jenkins, CI/CD, Git, Nginx, Firebase, Tailwind CSS, JEST, SuperTest, Qt (QML), Datadog

LANGUAGE PROFICIENCY

Turkish: Native or Bilingual Proficiency

English: Native or Bilingual Proficiency

Abkhazian: Native or Bilingual Proficiency

Russian: Limited Proficiency

Spanish: Limited Proficiency

Arabic: Limited Proficiency