

Akshat Kalra

akalra06@student.ubc.ca | +1 236-996-7692 | akshatkalra.com | linkedin.com/in/akshatkalra5/ | github.com/Akshat-Kalra

EDUCATION

University of British Columbia

Vancouver, BC

BSc Combined Major in Computer Science and Statistics

Expected Graduation : May 2027

- **Scholarships & Awards:** Faculty Of Science International Student Scholarship, Outstanding International Student Scholarship, Dean's Honour List.
- **Relevant coursework:** Computer Networking (**97%**), Software Construction in Java (**91%**), Models of Computation [Discrete Mathematics] (**93%**), Probability Theory (**91%**), Computer Systems (**88%**)

EXPERIENCE

Software Developer Intern (Co-op)

Vancouver, BC

University of British Columbia, Vancouver

May 2025 - Present

- Building and maintaining [HelpMe](#), a course assistant application **used by 1500+ students at UBC** and projected to be used by **5000+ students** every academic term.
- Took the initiative and went beyond role expectations by contributing to GitHub issues from the day one of the role
- Worked on 5+ issue fixes and 3 large feature to the application in the first month; along with positive feedback on the pull requests.

Undergraduate Teaching Assistant

Vancouver, BC

Department of Computer Science & Department of Philosophy, UBC

Sep 2023 - Present

- **CPSC 121 (Models of Computation):** Led weekly discussion sections and co-led labs to teach discrete math, logic circuits, and finite state machines.
- **PHIL 220 (Symbolic Logic):** Held weekly office hours; graded 200+ assignments and exams with detailed feedback on formal logic and proofs.

TECHNICAL PROJECTS

[Tranquilo](#) | Next.js, Flask, SQLite, BERTopic

Jan 2025

- Built AI-powered mental-health journal using RAG, BERTopic & therapist-response data for therapist-like feedback.
- Architected microservices backend & API pipelines, **cutting RTT from 15+ s to 2-4 s**.

[Prediction Model for Airbnb Policy Effects](#) | 1st Place @ Case Competition | Scikit-learn

Nov 2024

- Built end-to-end Scikit-learn pipeline, reducing MSE from **1.64 M** to **1.19 M**.
- Achieved a **27.4% improvement over baseline model**
- Engineered features, tuned hyperparameters & ran recursive feature elimination for accuracy & interpretability; documented in a [Medium article](#).

[Eco-Circle](#) | [AWS Hackathon Winner](#) | AWS, Next.js, Python

Oct 2024

- Built AI marketplace for sustainable purchasing & upcycling with Llama 3.1 70B Instruct recommendations.
- Deployed serverless **AWS stack (Lambda, DynamoDB, API Gateway, Bedrock, S3)** for scalable performance.

TECHNICAL EXTRACURRICULARS

[Autonomous Underwater Vehicle – UBC Subbots](#) | C++, ROS2, Python

Sep 2024 – Present

- Part of the engineering team designing an AUV competing in the [RoboSub](#).
- Worked on a containerized dev environment (Ubuntu 20.04, ROS2), **reducing onboarding time for new members**.
- Worked on the ROS2-based computer vision integration, supporting object retrieval and navigation for the AUV.

Hackathons

- nwPlus cmd-f 2025 – **Mentor & Judge**
- nwPlus HackCamp 2024 – **Mentor**
- ASA Datafest 2025 – **Mentor**
- UBC WiDS Case Competition – **1st Place**
- UBC GDSC × Launchpad Hackathon – **Winner**
- UBC CIC × AWS Gen AI & Sustainability Hackathon – **3rd Place**

TECHNICAL SKILLS

Languages: C, C++, Java, TypeScript, JavaScript, SQL, Python, R, Racket (Dialect of Lisp)

Developer Tools: AWS, Postman, Docker, Git, GitHub, LaTeX, ROS2, TypeORM, Swagger, Scalar

Libraries/Frameworks: ReactJS, NextJS, NestJS, NodeJS, Scikit-learn, Flask