AKSHAT KALRA

+1 236-996-7692 • akshatkalra2005@gmail.com • linkedin.com/in/akshat-kalra-783819156/ •
github.com/Akshat-Kalra • akshatkalra.com

TECHNICAL SKILLS

Programming Languages: Java, C++, JavaScript, Python, HTML, CSS, R , Racket(Dialect of Lisp)
Frontend: Vanilla Javascript, HTML, CSS, ReactJS
Backend: Node.js , Express.js , MongoDB
Statistical Data Analysis: R (Programming Language), Python, Asymptotic Tests , Hypotheses Testing & Bootstrapping
Additional Skills: Git, GitHub, LaTeX

EXPERIENCE

UBC, Department of Philosophy: Undergraduate Teaching Assistant Sep 2023 - Dec 2023

- Undergradute Teaching Assitant (UTA)for PHIL 220 (Symbolic Logic), a **second year philosophy course** that introduces **sentential logic** and **predicate logic**.
- Translation from natural language; truth tables and interpretations; **systems of natural deduction** up to **relational predicate logic** with identity; alternative proof methods.

ACADEMIC PROJECTS

Portfolio Website Jul 2024 - Present

Designed and developed a dynamic, single-page personal portfolio website using **ReactJS** to showcase my skills and projects. The site features a modern, minimalist and responsive design with smooth navigation and interactive elements. **Tech stack**: **ReactJS**, **CSS3**, **Javascript ES6+**, **JSX (Javascript XML)**.

- React-based architecture for efficient rendering and state management. Dynamic theming with dark/light mode toggle using Context API
- Extensive use of React Hooks for functional component-based architecture

FitTrackr: A Comprehensive Health and Fitness Companion Jan 2024 - Apr 2024

Developed a Java-based application that allows fitness enthusiasts to scientifically optimize their workouts and track progress. Used **Java Swing** for GUI and **JUnit5** for unit testing the application. Key features include:

- Logging workouts with exercises, sets, reps, and weights
- Calculating and tracking total workout volume
- Visualizing progress in specific exercises over time
- Displaying overall workout volume and progress since day one
- Saving and loading workout data for long-term tracking

Statistical Inference on Whether Ticket Classes affect Survival on the RMS Titanic Jan 2023 - Apr 2023

Collaborated in a team of four to conduct a statistical inferential analysis as a part of the final project for our STAT 201 class. Utilized the **"Titanic - Machine Learning from Disaster"** data set from Kaggle.

- The inferential question targeted was "Does the ticket class on the RMS Titanic determine whether they survived or not?".
- Utilized **Hypothesis testing**, **Bootstrap Methods**, **Standard Error Method** and **Two-Sample Z-Test** to arrive at an interesting conclusion.
- Received a perfect score of 100/100 for the final project.

EDUCATION

Bachelor of Science, Statistics with Thematic Concentration in Computer Science | Dean's Honour List | OIS Scholar Graduating May 2027

University of British Columbia, Vancouver, BC Current GPA: 4.30/4.33
Faculty of Science
Relevant coursework: CPSC 210 **(Software Construction) [91%]**, CPSC 121 **(Discrete Mathematics) [93%]** , CPSC 221 **(Data Structures and Algorithms)**, DSCI 100 & STAT 201 **(Data Science & Statistical Inference with Data Science) [88%]** , STAT 302 **(Introduction to Probability) [91%]** .