

PRISHA SARNA

+1-(825) 888-0924 | prishasarna@gmail.com

LinkedIn: <https://www.linkedin.com/in/prishasarna> | Github: <https://github.com/prishasarna>

KEY STRENGTHS AND CAREER VISION

A fast learner and passionate Computing Science student at the University of Alberta, with strong foundations in programming, machine learning, and data analytics. Currently seeking industry experience to apply and refine expertise in real-world settings. Driven by a long-term goal of pursuing a Master's and Ph.D., with a focus on advanced machine learning and artificial intelligence research.

EDUCATION

University of Alberta | Major in Computing Science [Current GPA:3.1]

Sep 2022 – April 2026

Key Coursework: Python Programming (Cmput 174,175), C Programming (CMPUT 201), Data Structures (CMPUT 204), Machine Learning (CMPUT267), Reinforcement Learning (CMPUT 365), Search and Planning in AI (CMPUT366), Databases (CMPUT 291), Mathematics for Computing (CMPUT 272), Games, Puzzles and Algorithms (CMPUT 355), Introduction to Software Development (CMPUT 301), Advanced Machine Learning (CMPUT 467)

Bhatnagar International School | High School Diploma [Overall:93%]

Mar 2005 - Mar 2022

TECHNICAL SKILLS

- **Programming Languages:** R, Python (Numpy, Pandas, Sklearn, Matplotlib, Seaborn), Java, C, Julia
- **Web Development:** HTML, CSS, Figma, Git, GitHub, React, Tailwind CSS
- **Databases:** SQL, MongoDB
- **Tools:** Git, Firebase, Android Studio, Figma
- **Soft Skills:** Leadership, Teamwork, Adaptability, Problem-Solving, Multitasking, Strong Communication

TECHNICAL PROJECTS

Full Stack App (Team Project)

Technologies: Firebase, HTML, GitHub, Android studio, Java, CSS

- Developed a Full stack Android application to facilitate fair event registrations using a lottery-based selection mechanism, enhancing accessibility for participants with time constraints.
- Designed and implemented the front-end interface, focusing on user-friendly and responsive HTML layouts.
- Developed the initial login screen for entrants, enabling seamless registration with input fields for personal information and secure access.
- Collaborated with team members to ensure a cohesive user experience by aligning the front-end components with back-end functionality.
- Enhanced usability and accessibility by creating intuitive navigation and visually appealing design elements for the application interface.
- Facilitated real-time data management by integrating Firebase for event details, waiting lists, and notification updates.

Interactive Database Management System (Python & MongoDB)

Technologies: Python, MongoDB

- Developed a command-line application to simulate a library database management system, integrating functionalities for user authentication, book borrowings, and penalties.
- Built a relational database using the provided schema, incorporating tables for members, books, reviews, and penalties.
- Designed CRUD operations to allow seamless interaction with the database, enabling features such as book borrowing, review submission, and penalty tracking.
- Collaborated in a team of 3-4 members, managing contributions via GitHub to ensure equal participation and efficient version control.

Data Extraction and Management Using SQL

- Designed and implemented SQL queries to extract insights from a relational database schema featuring members, books, borrowings, penalties, and reviews.
- Created complex queries to handle scenarios such as tracking overdue borrowings, priority-based waitlists, and book reviews.
- Demonstrated advanced SQL techniques by avoiding aggregation and nesting where required, ensuring efficiency and clarity.
- Worked with SQLite3 to manage the database schema and execute queries effectively.

Dynamic Web Interface Development

Technologies: HTML, CSS

- Built a fully functional web interface inspired by the YouTube home screen, chosen for its complex layout and diverse design implementations, including clickable video thumbnails and dynamic navigation.
- Emulated real-world UI/UX features, such as responsive design and interactive elements, to enhance development proficiency.
- Focused on improving visual design skills by crafting a clean and user-friendly layout with attention to spacing, colors, and typography.
- Enhanced interactivity and usability by ensuring smooth navigation and a consistent user experience across devices.

Data Preprocessing and Visualization

Technologies: Python, NumPy, Pandas, Seaborn, Matplotlib, Sklearn

- Processed various huge datasets like the dataset for a school, for skin diseases and about the countries of the world by filtering and cleaning data for analysis, by using the techniques used for data preprocessing and further visualization by putting them in graphs and charts for further analysis.
- Created insightful visualizations to assist in generating data-driven reports.

CERTIFICATIONS AND COURSES

1. **Tinker Coders - Practical Machine Learning Methods:** Developed expertise in applying machine learning techniques to real-world problems.
2. **Tinker Coders - Foundations of Data Science :** Gained a strong foundation in data science principles, data analysis, and visualization.
3. **Google Digital Marketing Certification:** Gained expertise in digital marketing strategies, including SEO, SEM, and analytics to optimize online presence.
4. **IBM: What is Data Science?:** Acquired foundational knowledge of data science concepts, workflows, and real-world applications.
5. **Coursera RL Specialization (4 Courses):** Mastered reinforcement learning techniques, including Dynamic Programming, Policy Iteration, and Deep Q-Learning.
6. **Aptech: Fundamentals of C:** Built a strong foundation in C programming, focusing on syntax, control structures, and basic algorithms.
7. **Aptech: Fundamentals of Python and SQL:** Developed proficiency in Python programming and SQL for data analysis and database management.

EXTRACURRICULAR ACTIVITIES

- **CanCWIC 2024 (Celebration of Women in Computing Science):** Attended a prestigious event featuring industry leaders from organizations such as RBC, Morgan Stanley, and CN Rail. Gained valuable insights into navigating careers in technology while advocating for diversity and inclusion in STEM fields.
- **Leadership and Campus Involvement:** Volunteered as an Events Crew Leader with the UASU, a Food Sorter for the Campus Food Bank, and with the Elizabeth Fry Society to support community initiatives. Served on the UASU DIE Board as a Tribune, interpreting bylaws and hearing election-related appeals, and as a Group Grant Adjudicator, allocating funding to student groups.
- **Customer Service:** Worked as a Sales Associate at Mama Leila's Keto Treats and Rocket Fizz, managing transactions, assisting customers, handling complaints, and ensuring a positive shopping experience.
- **Student Union (SU) Tutor for CMPUT 291, 272, 267, and 204:** Provide personalized tutoring to students, guiding them in excelling in exams, solving complex problems, and creating effective study notes. Facilitate understanding of key concepts and practical applications to enhance academic performance.