Manan Jain

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Education

University of Alberta Expected: May 2026
*BSc Honors in Computer Science – **GPA: 3.6*** *Edmonton, AB*

Relevant Coursework:

- **Operating Systems**, **Computer Organization and Architecture**, **Machine Learning**, Algorithms, Software Engineering, Introduction to File and Database Management, Formal Systems and Logic

Awards: Faculty of Science Scholarship (2021-2023), Dean's Honor Roll (2022-2023)

Experience

Invidi Technologies Edmonton, AB
Software Engineer Intern *May 2024 – Present*

- Contributed to the development of an ad targeting system using Kotlin, Docker, and AWS, optimizing the delivery of personalized advertisements across various platforms, enhancing view count metrics by **20%**.
- Worked with AWS cloud services to deploy applications, ensuring high availability and reliability.
- Designed and implemented an industries API to enforce competitive separation among advertisers, ensuring that competing companies' ads were not shown consecutively, enhancing compliance with industry regulations.

UofA Blueprint Edmonton, AB
Full-Stack Developer *Feb. 2023 – August 2023*

- Collaborated with a team of 12 developers to successfully deliver a robust web application for a non-profit organization.
- Utilized React, and MongoDB to develop innovative features and functionalities for the web application, resulting in a **decrease in loading time by 20%.**
- Implemented **agile methodology** throughout the development process, effectively managing project timelines.

Projects

GeoQR (Java, Android Studio)

- Engineered an **Android application** that incentivizes social interaction and physical exercise through gamification, leveraging QR code collection as a core gameplay mechanic.
- Gained expertise in utilizing the **Google Maps API** and implemented the maps functionality, enabling users to view the locations of the scanned QR codes.
- Optimized load times and reduced crashes by **60%** by implementing **threading and asynchronous programming in Java.**

Embedded Systems Application (RISC-V Assembly)

- Developed a snake game with three different difficulty levels using RISC-V **assembly language**.
- Implemented **user and timer interrupts** to enhance the game experience.
- Gained a deep understanding of **interrupts and exception handlers** in assembly programming.

Shell: System-Level Process Orchestrator (C++)

- Engineered a sophisticated command line shell entirely in **C++**, proficiently orchestrating a wide array of **system-level processes**.
- Prioritized user-friendly interactions, ensuring intuitive command input and output.
- Demonstrated adeptness in **low-level system operations** for seamless process execution.

Technical Skills

- **Programming Languages**: Kotlin, Java, C++, Python, JavaScript, RISC-V Assembly, SQL
- **Frameworks**: React, Express, Vue
- **Developer Tools**: Android Studio, Git, Docker, Kubernetes, Amazon Web Services, MySQL, MongoDB