Manan Jain

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Education

University of Alberta
BSc Honors in Computer Science – GPA: 3.6

Expected: May 2026
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
Software Engineer Intern

Edmonton, AB
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
Full-Stack Developer

Edmonton, AB
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.**

StudyAmp (FastAPI, React, EEG Analysis)

- Developed StudyAmp, a productivity application that monitors focus levels during study sessions using EEG data and audio analysis.
- Built a responsive frontend using **React** for data visualization with **Chart.js** and implemented real-time data streaming through a **FastAPI** backend.
- Integrated EEG data processing and audio analysis to provide real-time feedback and personalized insights for users to enhance their study performance.

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