

Marvin Uwalaka

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EDUCATION

University of Alberta

Bachelor of Science in Computer Science

Edmonton, AB

Sept. 2022 – present

EXPERIENCE

Research Assistant Intern

Rehabilitation Robotics Lab

Mar. 2025 – Jun. 2025

Edmonton, AB

- Processed large-scale biomechanics and motion-sensor datasets using MATLAB for analysis and visualization.
- Developed a predictive model achieving 85% accuracy in forecasting rehabilitation outcomes using sensor-derived features.
- Assisted in structured data collection for 50+ participants, ensuring consistency and reliability across trials.
- Contributed to research involving XR technologies, digital health, and intelligent rehabilitation systems.

Full-Stack Developer

UNIYE Platform (Student-Led Project)

Apr. 2025 - present

Edmonton, AB

- Implemented interactive platform features including likes, comments, upvotes, and engagement tracking.
- Designed filtering and recommendation systems to generate personalized *For You* feeds based on user activity.
- Ensured reliability through optimized database queries, schema design, and permission-based logic.
- Built backend services using Node.js and PostgreSQL for authentication, storage, and user management.

Web Developer

Sencelosia

Jan. 2024 – Mar. 2025

Edmonton, AB

- Developed a full-stack Django platform supporting community events, submissions, and dynamic content.
- Improved site performance and SEO, contributing to 2,000+ visits and generating \$4,000 in revenue.
- Designed user-centric flows and optimized UI/UX for content discovery and engagement.

PROJECTS

Apollo Event Lottery System | Android, Firebase Firestore, QR Scanning

Sep. 2025 - present

- Developing an Android app enabling fair event registration via a lottery-based waiting list system.
- Implemented core features including event creation, QR code scanning, waiting list enrollment, and user role separation (entrant, organizer, admin).
- Built backend logic using Firestore for storing event data, entrants, images, and real-time updates.
- Collaborated with a team using GitHub, UML diagrams, and sprint planning to deliver iterative prototypes.

Literary & Art Magazine Platform | Web Development, Django

Sept. 2024

- Developed the official website for the online literary and art magazine, ensuring seamless navigation and responsive design across devices.
- Built and maintained a submission/artist database with organized contributor records and automated content display.
- Enhanced user experience by implementing new features, optimizing page performance, and refining site architecture.

TECHNICAL SKILLS

Languages: Python, JavaScript, C, SQL, HTML/CSS, Java, Kotlin

Frameworks: Django, React, Node.js, Express

Databases: PostgreSQL, SQLite

Tools: Git, GitHub, VS Code, MATLAB, Postman

Domains: Data Engineering, Predictive Modeling, Digital Health, UX/UI, Full-Stack Development