Munib Mir

munibmir09@gmail.com • 780-781-8260 • github.com/IAMMUNIBMIR • linkedin.com/in/munibmir

EDUCATION

University of Alberta — BSc Honours Computing Science   **Sep 2023 – Apr 2027**
- Dean's List (2024–2025)   GPA: 3.8
- Dean's Research Award (2025)
- Key Coursework: Reinforcement Learning, Search and Planning in AI, Data Management, Data Structures and Algorithms

EXPERIENCE

Software Engineering Intern — Modern West Tech Solutions | Riyadh, KSA   **May 2025 – Aug 2025**
- Implemented Modern West's Python/Django–based tax-management modules into client ERP environments under senior-engineer mentorship, aligning bespoke accounting schemas with ZATCA regulations.
- Extended the core VAT-calculation engine to accommodate new e-invoicing mandates, reducing manual adjustments by 30% and accelerating compliance cycles.
- Developed comprehensive unit and integration tests (90%+ coverage) using pytest and unittest, ensuring regulatory adherence before production deployments.
- Installed and configured tax-automation software on client on-premises servers under senior-engineer supervision, collaborating with IT teams to troubleshoot integration issues and ensure reliable performance.
- Authored technical documentation and led hands-on workshops for client IT teams, enabling seamless adoption of new tax-reporting features.

Virtual Reality Research Assistant | University of Alberta | Edmonton, AB   **Jan 2025 – Apr 2025**
- Designed and implemented an immersive Unity (C#) VR simulation of layer-by-layer 3-D printing for a lunar habitat, with seamless switching between Earth and Moon environments.
- Built a custom additive-manufacturing logic system that procedurally spawns and animates printable wall layers while tracking progress and material usage in real time.
- Integrated gesture-based XR interactions (pinch, grab, throw) via Oculus / XR Interaction Toolkit to enable intuitive model selection and construction control.
- Optimized performance (draw calls, collider batching, texture reuse) to maintain smooth headset frame rates within complex structural scenes.
- Presented prototype and technical methodology at the Dean's Research Award poster symposium, receiving positive faculty feedback and identifying future multi-user and physics extensions.

PROJECTS

DiffDive – AI-Enhanced Code-Review Bot   Python, Flask, PostgreSQL, OpenAI API
Architected an AI-driven CLI utility that orchestrates real-time parsing of GitHub pull-request diffs to produce incisive change summaries, generate convention-compliant commit recommendations, and surface contextual static-analysis annotations—leveraging bespoke NLP pipelines and a unified-diff parser for enterprise-grade code quality enforcement.

SwiftStock – Serverless Inventory Orchestration Platform   React, AWS CDK, Lambda, X-Ray
Engineered a highly scalable, serverless microservices architecture for end-to-end inventory lifecycle management, featuring advanced exponential-smoothing demand forecasting and automated warehouse rebalancing; integrated AWS X-Ray for full-stack observability and implemented robust CI/CD workflows via AWS CDK.

ViberVerse – Sentiment-Driven Social Analytics App   React Native, Firebase, TensorFlow Lite
Developed a cross-platform mobile application that enables granular mood journaling and dynamic community sentiment visualizations; deployed on-device TensorFlow Lite models for real-time inference and leveraged Firebase for secure authentication, real-time data synchronization, and auto-scaling backend services.

View additional projects: iammunibmir.netlify.app

LEADERSHIP & COMMUNICATION

External Executive, Pakistani Students Association   **Jan 2024 – Present**
- Led a two-person external relations team to secure over $5,000 in sponsorships and orchestrate events for 100+ attendees.
- Crafted persuasive pitch decks and negotiated partnerships with 10+ local businesses, boosting engagement and funding.
- Orchestrated targeted social media and email marketing campaigns, driving a 30% increase in attendee registrations and elevating event visibility.

TECHNICAL SKILLS

- **Programming Languages:** Python, C, Java, SQL, C#
- **Frameworks & Libraries:** React, React Native, Flask, Unity
- **Cloud & Infrastructure:** AWS (CDK, Lambda, X-Ray), Render, Firebase, PostgreSQL
- **APIs & Tools:** OpenAI API (GPT-4), Drizzle ORM, Chadcn, Neon Console, Tabler Icons
- **Expertise:** Machine Learning, Deep Learning, Generative AI, Reinforcement Learning, Neural Networks, Regression