MOMIN AMAN

LinkedIn ◇ Portfolio

IMMERSIVE SYSTEM ARCHITECT | INTEGRATING AI & REAL-TIME EXPERIENCES AT SCALE

SKILLS

Spatial Intelligence	Apple Vision Pro, Meta Quest, WebXR, Sensor Fusion, Haptics, SLAM interaction
Intelligent Systems	RAG-based LLM Orchestration, Vector DBs, PyTorch, TensorFlow, Model Pruning
Systems Orchestration	High-concurrency Node.js, AWS Cloud-Edge Infra, Docker, Kubernetes, CI/CD
Real-Time Foundations	Unity, Unreal Engine, C#, C++, Three.js, Python, Low-level Graphics Optimization

EXPERIENCE

Independent Solutions Architect, Various — Seattle, WA 2024 – Present

- Developed RAG-based LLM architectures and deep learning models for educational platforms, resulting in **35% increase in user engagement** through tailored inference.
- Architected a multi-modal 3D rendering core for native mobile integration, supporting high-fidelity model visualization, interactive unboxing sequences, and seamless transitions between 2D/3D views and AR.
- Designed a cross-platform generative AI pipeline harmonizing real-world AR captures with digital assets using dynamic prompt orchestration.
- Engineered location-based and mixed-reality applications including medical simulations and narrative systems for historical preservation.

Software Engineer, Create Neptune — New York, NY 2022 – 2024

- Engineered a dynamically scalable content engine serving **30,000+ students** across distributed campuses.
- Designed an audio processing pipeline using Whisper AI for real-time speech recognition and pronunciation feedback with AWS S3 integration.
- Developed native integration for a mobile holographic display (RYZ SDK), rendering high-performance 3D scenes on proprietary hardware.
- Orchestrated development cycles across a 15-person team ensuring production-grade performance on mobile.

Head of Technical Development, Evolve Innovative Solutions — Singapore 2018 – 2021

- Directed a six-person team managing end-to-end delivery of **30+ XR experiences** across industries.
- Engineered VR simulation infrastructure supporting **1,500+ participants** over 6 days with high system stability.
- Designed high-performance gameplay systems balancing visual fidelity with hardware constraints.

Lead Systems Architect, Cresset Technology — Lahore, Pakistan 2017 – 2019

- Architected a cross-platform AR retail ecosystem enabling real-time try-on and secure commerce workflows.
- Built a hybrid CPU/GPU batch rendering system achieving **8x performance gains** for industrial simulations.

Senior Software Architect | Real-Time Gaming, OneByte LLC — Lahore, Pakistan 2017

- Engineered full-stack gameplay and backend systems supporting **30,000 active users** within a 21-day launch.

Senior Technical Lead | Mobile Ecosystems, OffRoad Studios — Lahore, Pakistan 2015 – 2017

- Directed multi-platform game development achieving **300,000+ installs** across released titles.

Co-Founder | Technical Systems Architect, ICAW — Lahore, Pakistan 2013 – 2015

- Co-founded and scaled development of 50+ mobile titles reaching **138 million users** globally.

EDUCATION

Master's in Game Design, New York University — New York, NY 2021 – 2023

Bachelor of Science, Computer Science, University of the Punjab — Lahore, Pakistan 2010 – 2014