ZAID KAMIL

(424) 382-6112 ◇ Los Angeles, CA ◇ zaidmuscat@gmail.com ◇ linkedin.com/in/zaid-kamil ◇ mzaidk.net

EDUCATION

Master of Computer Science, California State University – Dominguez Hills — Expected Dec 2025
Coursework: AI, Data Structures & Algorithms, Software Engineering, Networking — GPA: 3.90
Bachelor of Chemical Engineering, Texas A&M University — 2017–2020

SKILLS

Programming	C++, Python, C#, Java, SQL, JavaScript, Bash
Systems/Tech	Backend Systems, Distributed Systems, Linux, REST APIs, Unity, Git, Docker, OpenCV
Platforms	Azure, AWS, Android (NDK/SDK), ROS, PyTorch3D, Databases
Dev Practices	System Design, Observability, Logging/Instrumentation, Profiling, CI/CD, Automated Testing
AI/ML	LLMs, Inference Pipelines, Computer Vision, Real-time Data Processing

EXPERIENCE

Founder & Software Engineer — Sep 2023 – Present
Z-Map (www.zrmap.com) — Los Angeles, CA

- Designed and implemented backend components in C++ and Python for a real-time digital-twin system handling 360° media, IoT sensor ingestion, and live telemetry for AR/VR headsets with a 60% improvement in pipeline throughput.
- Designed real-time interactive 3D environments using Unity and Blender and added interactive sensor dashboards, and AI NPC Avatars using C# and SQL, improving immersive user experience by 80%.
- Implemented instrumentation, structured logging, and metrics collection (latency, jitter, packet loss) to improve observability across server and headset pipelines.
- Developed backend dashboards for system state, device telemetry, and media health using SQL + Python, enabling real-time monitoring of 50+ concurrent data streams.

XR Software Engineer — Jul 2024 – Present
Toro Auxiliary Partners — Los Angeles, CA

- Built real-time physics and rendering subsystems in C# and C++ plugins for XR simulations, emphasizing efficiency, determinism, and cross-device reliability.
- Implemented profiling tools, frame-timing metrics, and logging utilities to track simulation stability across Android-based headsets. zz

Information Technology Assistant — Mar 2022 – Present
CSUDH Division of IT — Los Angeles, CA

- Built automation scripts to streamline system diagnostics and logging of 150+ classrooms, improving fault detection and reducing downtime by 45%.
- Supported backend systems and collaborated with engineering teams to ensure reliability and uptime across distributed IT infrastructure.

Software Engineering Intern — Mar 2024 – Nov 2024
MindHome Inc — Denver, CO

- Developed a VR fire-safety training simulator used for enterprise safety compliance training, reducing training time by 40% through realistic haptic feedback and ROS-based hand-tracking

Field Engineer — Sep 2020 – Sep 2021
Qatar Petroleum — Doha, Qatar

- Diagnosed and optimized PLC/DCS industrial process systems experience directly applicable to low-level debugging, systems thinking, and real-world reliability constraints.

NOTABLE PROJECTS

Mixed Reality Software Researcher — Sep 2018 – Dec 2021
Built a HoloLens desalination simulation using Unity and C++/MRTK with 45% improvement in learning outcomes; published in IEEE.

AR Smart Glass — 2019 – 2020
Developed a AR smart-glass prototype using Unity + C++ OpenCV modules achieving 30 FPS real-time face/object recognition.

VR Drilling Simulation — 2017
Created a VR drilling simulator used by 200+ engineering students; recognized by WorldViz for innovation in interactive training.

PUBLICATIONS

- Kamil, M.Z. et al. (2020). Development of an Educational Mixed Reality Game on Water Desalination Plants, IEEE.
- Kamil, Z. (2025). Real-Time Data Visualization in XR, CSU Scholar.
- Kamil, Z. et al. (2019). Implementing VR/AR Systems for Desalination Plant Training, OAK Trust.