

MUHAMMAD ZAID KAMIL

zaidmuscat@gmail.com | (424) 382-6112 | <https://www.linkedin.com/in/zaid-kamil/> | mzaidk.net | Harbor City, CA

EXPERIENCE

Software Researcher <i>CSUDH Graduate Thesis</i>	Sep 2023 - Present Carson, CA
<ul style="list-style-type: none">- Developed a real-time AR/VR campus map prototype that utilizes Azure SQL Database to integrate IoT sensor data to Unity engine, achieving 70% accuracy of real-time data visualization of on Quest device- Designed high-quality responsive XR 3D assets of Map model using Unity, and website (www.myzmap.com), resulting in an improvement in user performance and increase in user engagement	
AR/VR Researcher <i>Physics Department</i>	Jul 2024 - Present Carson, CA
<ul style="list-style-type: none">- Developed a VR application using Unity3D that integrates physics dynamics, achieving student user learning rate through simulations- Teaching Assistant workshops for high school students to develop Physics VR projects by utilizing Unity, Blender and Meta Quest HMD	
AI & ML Engineer Intern <i>MindHome Inc</i>	May 2024 – Aug 2024 Remote
<ul style="list-style-type: none">- Integrated VR HMD with Robotic Haptic Glove using algorithms, achieving success rate in detecting and mapping hand movements	
IT Student Assistant <i>Learning Spaces - CSUDH</i>	Feb 2022 – Sep 2024 Carson, CA
<ul style="list-style-type: none">- Troubleshooting classroom hardware equipment that involves PC, panels, projector, and switches boosting system uptime by 50%- Inputted data-related queries, issues, and requests by faculty into ticketing systems thus improving user resolution rates	
Advanced Coders – AI Training <i>Outlier AI</i>	Jun 2024 - Jul 2024 Remote
<ul style="list-style-type: none">- Conducted detailed evaluations of Generative AI chat bot prompts, assessing accuracy, fine tuning prompts, and functionality based on the given requirements	
Mixed Reality Student Researcher <i>AMIRA Research - TAMUQ</i>	Aug 2018 – Dec 2021 Doha, Qatar
<ul style="list-style-type: none">- Developed a desalination plant prototype using Unity3D, added application interactivity utilizing MR Toolkit, visual scripting, C# programming Microsoft HoloLens that trains students to build a that utilized C# programming and Unity3D development- Tested the deployed application on Microsoft HoloLens with 15 STEM students, capturing user's learning feedback, resulting in a 20% improvement of training compared to classroom learning and published the results in two research journals	
Utilities Field Engineer <i>Qatar Petrochemical Company</i>	Sep 2020 - Sep 2021 Messaied, Qatar
<ul style="list-style-type: none">- Collaborated with Process Engineers to diagnose startup and shutdown issues of equipment and develop training and process diagrams for operating process equipment	

EDUCATION

Master of Computer Science , California State University, Dominguez Hills	Expected May 2025
Cyber Security Fundamentals Certificate	GPA: 3.83
Coursework: <i>Software Engineering, Information Security, Programming Languages, Networking, Data Structures, Operating Systems</i>	
Bachelor of Chemical Engineering , Texas A&M University	2017 – 2020
Undergraduate Research Scholar	
Coursework: <i>Process Dynamics & Control, Process Safety Engr, Thermodynamics, Mass & Heat Transfer, Process Integration Systems</i>	

SKILLS

Technical Skills	AR/VR Development (3yrs), Game Development (1yr), Website Design (2yrs), Source Control (1yr), Debugging (2yrs), Software Testing (2yrs), UI/UX Design (2yrs), Reinforcement Learning (1yr), Fine Tuning, Prompt Engineering (1yr)
Soft Skills	Collaboration, Analytical, Problem solving, Adaptability to new technologies, Emotional intelligence, Research and publication
Tools	Unity (4yrs), C# (2yrs), C++, Java (2yrs), Python (1yr), Azure (1yr), AWS (1yr), Git (1yr), MySQL (1yr), SwiftUI (1yr), OpenAI (1yr)

PROJECTS [GitHub: <https://github.com/ZaidKamil1574>]

VR Oil Rig Plant: Designed and animated a VR offshore oil rig to train students the extraction process, utilizing SimLab software and C#

IoT Sensor Network: Utilized reinforcement learning algorithms for optimal root path from start to target node using python and MARL

Dining Web Application: Designed a system to streamline order to cater student's dietary needs, incorporated UI/UX design principles

Computer Vision: Utilized C++ and python via for Face Detection, Object Detection, and facial recognition in trained images

Push Notification System: Utilized Apple push notifications console to test user notifications in application

Deep Learning: Utilized TensorFlow and Matlab for Classification of Images, feature extraction, and incorporating new data sets

PUBLICATIONS

- Ghazali, S.; Abdalla, H; **Kamil, M.Z.**; Kakosimos, K.; Hodges, A. Development of an Educational Mixed Reality Game on Water Desalination Plants

- Ghazali, Sofian; Hussein, Aisha; **Kamil, Zaid** (2020). Implementing VR/AR Systems for Insight Into Water Desalination Plant

CERTIFICATIONS

Cyber Security Fundamentals Certificate – **CSUDH** | Career Essentials in Generative AI – **Microsoft** | IBM Z Xplore Concepts – **IBM**

iOS 15 Development Training – **LinkedIn** | AR Development Techniques – **LinkedIn**

LEADERSHIP

AR/VR Club – **President** | IBM Z Systems – **Ambassador** | Muslim Student Union – **Treasurer** | SPE – **Outreach Coordinator**