Mohamad SHAABAN

Cloud Engineer

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🏠 Genova, Italy
🔗 https://sha3sha3.github.io/Portfolio

A Cloud Systems Engineer that is passionate about massively multiplayer online games development & Unreal Engine. I develop tools and plugins for Unreal Engine for Digital twins and online game development.

SOCIAL NETWORKS

R^G ResearchGate Profile

in LinkedIn Profile

 GitHub Profile

EDUCATION

PhD in Robotics and Autonomous systems — **University of Genoa, Genova, GE, Italy**

Since 2022

Lebanese Nano-satellite Program Training — **Lebanese CNRS, Beirut, BA, Lebanon**

From 2019 to 2020

Masters of Science - Electronics Engineering — **Lebanese International University , Beirut, BA, Lebanon**

From 2019 to 2020

Bachelor of Science - Electronics Engineering — **Lebanase International University, Beirut, BA, Lebanon**

From 2016 to 2018

Scientific Baccalaureate — **Ansar Public School, Beirut, BA, Lebanon**

From 2015 to 2016

WORK EXPERIENCE

Distributed Servers Systems — **DSS, Beirut, Lebanon**

Since 2020

A personal Project that aims to bring MMO features support for Unreal Engine

Project is considered widely popular among Unreal Engine indies

More on the projects portfolio

Cloud Systems Engineer — **Mobile Arts ME, Beirut, Lebanon**

From August 2020 to March 2022

Designing horizontally scalable cloud systems

Developing distributed systems

Maintaining cloud under massive traffic

Optimizing for best cost to performance

Embedded Engineer - Project based — **Maxwell Innovation Lab LLC, Beirut, Lebanon**

From June 2018 to March 2019

Firmware development and tuning for wearable devices

More Info in the Portfolio

COMPETITIONS AND AWARDS

- **Engineering Projects Competition:** First Place - 11/05/2018 - LIU Beirut, Lebanon
- **ARC4 Robotics Competition:** Third Place - 22/04/2018 - LU Beirut, Lebanon
- **Schools competition of Science:** None - 2016 -UNESCO Beirut, Lebanon
- **Schools competition of Science:** Bronze- 2015 -UNESCO Beirut, Lebanon

SKILLS

Cloud   Design, develop and deploy distributed systems with CI/CD

Multi language programming   From low level c to .Net6.0 for cloud, with multiple OS/CPU Architecture targeting

Unreal Engine Developer   Specialized in extending the engine and developing cloud based sub-systems

COMPUTER SKILLS KEYWORDS

C, C++, .NET, Unreal Engine, AWS, Altium Designer, Kafka, DDS, Redis, GRPC, SignalR, SQL/NoSql, Distributed Task Queue, RabbitMQ

LANGUAGES

Arabic Native, **English** Fluent, **Italian** A2

PUBLICATIONS

- **RICO-MR: An Open-Source Architecture for Robot Intent Communication through Mixed Reality**: 32nd IEEE International Conference on Robot and Human Interactive Communication (RO-MAN), Busan Korea, 2023
- **Digital Twins for Human-Robot Collaboration: A Future Perspective**: 18th International Conference on Intelligent Autonomous Systems (IAS), Suwon Korea, 2023
- **Integrating Digital Twin And Mixed Reality In Human-Robot Collaboration**: Italian Robotics and Intelligent Machines Conference, 2022, Italy

PROJECTS

An Up-to-date Projects portfolio can be always accessed at https://sha3sha3.github.io/Portfolio/

- **Dynamic servers' system:** Opensource Scalable MMO servers instantiation, dungeon instantiation and player balancing subsystem for unreal engine. GitHub Link: https://github.com/sha3sha3/UE-DSSPlugin.
- **Easy JWT:** Opensource Unreal Engine plugin for Authorization and JSON WEB Tokens Github Link**: https://github.com/sha3sha3/JWTPlugin**
- **Easy Kafka:** Kafka/Redpanda client sub-system for unreal engine. It supports producing and consuming records through blueprint and C++ Github Link: https://github.com/sha3sha3/UE-EasyKafka
- **RICO-MR**: Modular Digital Twin based on Unreal Engine, support on-runtime models importing, control and feedback Github Link: https://github.com/TheEngineRoom-UniGe/RICO-MR
- **Miniaturized IMU Sensor**: Design, fabricate, and program a 17x13 MM 9DOF IMU board with Wifi and flash storage on-baord. More on the projects portfolio.
- **Gluco-z:** Glucose measurement wearable device using non-invasive sensors technology, More on the projects portfolio.