

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

🔍 ResearchGate Profile

🌐 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** – Lebanese International University, Beirut, BA, Lebanon
From 2016 to 2018
- **Scientific Baccalaureate** – Ansar Public School, Beirut, BA, Lebanon
From 2015 to 2016

WORK EXPERIENCE

- **Tools Developer - Unreal Engine** – GAMEOLIC DEVELOPMENT STUDIO, Remote
Since June 2022
Create, develop, integrate, and deploy cloud-targeted tools for Unreal Engine tailored for Trimurti Online, an MMO title.
- **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-board. More on the projects portfolio.
- **Gluco-z:** Glucose measurement wearable device using non-invasive sensors technology, More on the projects portfolio.