Malek Jomni

Software Engineer | Game & XR Developer | Unity Developer

SUMMARY

Software Engineer with strong experience building mobile, PC, and immersive applications using Unity 3D. Proven ability to design and prototype complete game systems including core gameplay, UI, SDK integration, and analytics within agile, fast-paced environments. Skilled in performance optimization, modular architecture, and XR technologies (AR/VR/MR). Delivered interactive prototypes for both entertainment and industrial use cases, with a focus on clean, scalable code and efficient iteration.

PROFESSIONAL EXPERIENCE

Freelance Game Developer

Voodoo - Remote JAN 2025 - PRESENT

- Designed and pitched mobile game concepts through detailed Game Design Documents (GDDs)
- Developed a full-featured prototype including core gameplay, tutorial flow, and infinite mode
- Built systems for unit upgrades, merging mechanics, and a skill tree using modular architecture
- Managed the full game cycle: ideation, development, App Store submission, and testing
- Collaborated with publishing managers and iterated on gameplay to meet performance benchmarks
- First prototype published for testing: [HexGuard Google Play]

Computer Vision & XR Developer Intern

CESI (Lineact) - France - Pau

JUNE 2024 - DEC 2024

- Developed a real-time pose estimation system for object detection and augmented interaction
- Built an object detection and pose estimation pipeline using OpenCV and Python
- Designed and implemented a real-time video streaming architecture with WebRTC & sockets
- Developed monitoring and logging tools to collect research data and analyze performance
- Optimized system efficiency by refining module dependencies and resource management

Unity Developer Intern

Sartex (Denim House) - Tunis - Ksar Hellal

JUNE 2023 - JULY 2023

- Implemented a Full Body VR Rig using Inverse Kinematics and Animation Rigging
- Optimized performance (+60% FPS) using LODGroups, batching, and occlusion culling
- Utilized ProBuilder to design smooth and guided levels for players
- Coordinated with designers to create "Game-Ready" models, reducing integration time by 20%

MERN Stack Developer Intern

ESPRIT - Tunis - El Ghazela

JULY 2022 - SEPT 2022

- Developed a PDF component for document processing
- Designed a calendar interface using FullCalendar and React
- Integrated Mailgun API with Node.js and Express for email delivery

Mobile Game Developer Intern

MRCUS STUDIO - Tunis - Marsa

JUIL 2021 - AUG 2021

- Designed a vehicle controller for a Unity mobile game
- Created attachable cannon modules for strategic customization.
- Implemented game mechanics such as cannon shooting, boosters, and destructible elements

EDUCATION

Engineer's Degree: Computer Science, Specialization in GamiX (Gaming and Immersive Experience)

Private School of Engineering and Technology (Esprit) | Tunisia - 2019 - 2024

ACADEMIC PROJECTS

TimeSwing: VR Sports Game - 2023

- Developed a physics-based VR baseball game using Unity & XR Toolkit
- Implemented scoring system, multiplayer lobby (Node.js), & optimized collisions

Greed Island: Multiplayer Mobile Action Game - 2023

- Designed real-time combat & cooperative RPG mechanics in Unity
- Integrated multiplayer features with Mirror & Unity Gaming Services

TECHNICAL SKILLS

Languages: C#, C++, C, Java, Python, JavaScript, Dart

Game Development: Unity 3D, Unreal Engine, Mobile Games (iOS/Android), Multiplayer Networking (Mirror, Photon), XR (AR Foundation, MRTK, OpenXR), Animation Coding, AI Behaviour, GameAnalytics, Addressables

Software Engineering: SOLID Principles, Design Patterns (MVC, ECS), Object-Oriented Programming, RESTful APIs, .NET,

Spring Boot, Node.js, Qt, Flutter

DevOps & Tools: Git (GitHub, GitLab), Plastic SCM, Jenkins, CI/CD, Agile/Scrum

Other: Computer Vision (OpenCV), Machine Learning (basics), Performance Optimization, Logging & Monitoring Systems

LANGUAGES

English: Advanced, French: Upper Intermediate, Arabic: First Language