Michael Abid

Game Developer & AI Engineer — Unreal Engine / C++ · LLM Apps & Agents

michael.abid@outlook.fr | LinkedIn: michael-abid | GitHub: AbidMichael

(+33) 06 40 39 24 46
France
▶ Portfolio: michaelabid.com

Gameplay & network programmer moving into AI engineering. Master's in Game Programming (C++, Unreal Engine), networked VR gameplay shipped in production (Asterix VR). Across my projects, I first **integrated LLMs into games** (AI game master, NPCs with memory), then moved on to **general-purpose AI products and agent tooling** (MCP servers, image pipelines). I bring game-dev habits to AI: server-authoritative state, performance budgets, complete systems shipped end to end.

TECHNICAL SKILLS

AI & LLM

LLMs via APIs, SDKs, CLIs & MCP
Agent tools & MCP servers
Prompt & context engineering
Memory & image generation pipelines

GAME & REAL-TIME

Unreal C++ Gameplay Framework
Replication, server-authoritative logic
VR constraints & optimization
Profiling (Insights / RenderDoc)

LANGUAGES & TOOLS

C++, TypeScript / Node.js, Python
C#, PHP, SQL, Lua
React, Fastify, Remotion, SSE
Git, Perforce, Rider, Cloudflare

SELECTED PROJECTS

Chroniques IA — TypeScript / React / LLM APIs — Multiplayer AI role-playing game • Live

- **Role** Creator & developer — tabletop RPG run by an AI game master, up to 12 players
- **Systems** Persistent world engine, real-time table (SSE), NPC memory, world Codex with a public API.
- **Technical** › The LLM narrates; the server stays authoritative on dice, hit points, inventory and relationships.
- **Technical** › NPCs keep beliefs, goals and secrets across sessions; generated scene art with consistent character looks.

MotionForge — TypeScript / MCP / Remotion — Open source on GitHub • Tooling for AI agents

- **Role** Creator & developer — server that lets AI agents produce motion-design videos
- **Systems** MCP server + REST API (22 tools: validate, preview, render, visual QA), versioned preset libraries.
- **Technical** › JSON scene format built on presets: ~120 tokens per video instead of hundreds of lines of animation code.
- **Technical** › Segment cache that re-renders only changed scenes; previews for fast agent feedback.

IntimateAI — Node.js / React / LLM & image APIs — Social network of AI characters • Live

- **Role** Creator & developer — AI characters that post, comment and chat with real users
- **Technical** › Snapshot memory instead of resending the full history: long conversations stay coherent and cheaper.
- **Technical** › Image generation pipeline; external agents feed real-world news through an API and MCP server with moderation.

SuperTag — Unreal Engine / C++ / Node.js — PC Multiplayer • Steam online

- **Role** Main Gameplay & Network Programmer
- **Systems** Parkour movement (wall-run, climb, vault, grapple) extending *CharacterMovementComponent*.
- **Technical** › Client-side prediction and server reconciliation for high-speed movement.
- **Technical** › Steam online integration and a custom Node.js matchmaking server on Google Cloud, with a health dashboard.

EXPERIENCE

Independent · *Game Developer & AI Engineer* — France | 2024 - Present

- Developed multiplayer games in Unreal Engine 5 (replication, gameplay systems, Steam online, matchmaking services).
- Integrated LLMs into game projects, then designed and deployed AI products and an open-source MCP server.

Virtual Room · *Gameplay Programmer Intern — Asterix VR (UE5 C++)* — Paris, France | Sept. 2023 - Dec. 2023

- Networked gameplay for 4-player VR co-op: server-authoritative logic, RPC synchronization, bandwidth optimization.
- Fixed SteamVR compatibility issues; animation integration; code review (Swarm) in an agile team.

PickWitt · *Unity Programmer Intern — Gauntlet 109* — Remote | June 2022 - Aug. 2022

- Investor prototype: FSM-based enemy and boss AI, runtime level editor for designers.
- Refactored an undocumented legacy codebase, recovering 6 months of lost work in 2 weeks.

Hutchinson · *FullStack Web Developer* — Montargis, France | Apr. 2019 - Aug. 2020

- Internal R&D product catalog (PHP, SQL, JS), from requirements to delivery.

OTHER PROJECTS

Radar System (Garry's Mod) Lua project. Holographic radar addon with spatial query optimization. **19k+ unique downloads**.

EDUCATION

Master in Game Programming — 2021 - 2023
Rubika SupInfoGame (Valenciennes) — *Specialization: C++ & Unreal Engine*

Licence in Web & Mobile Computing — 2017 - 2020
Université d'Orléans — *Computer Science Foundation*

LANGUAGES

French	Native
English	Fluent (TOEIC 925)
German	Basic