HAMZA BEN SAID

GAME PROGRAMMER | AI & GAMEPLAY | UNREAL ENGINE & UNITY

Milan, Italy (open to relocation worldwide) | +39 329 696 2364 | securenoteben@gmail.com ↗
Portfolio: hamzabensaidportfolio.netlify.app ↗ | LinkedIn: linkedin.com/in/hamza-ben-said ↗ | Github: github.com/HamzaBenSaid05 ↗

PROFILE

Game Programmer specialized in **AI and gameplay systems**, with hands-on experience in **Unreal Engine** (C++ and Blueprints) and **Unity**. Experienced in building AI behaviors, gameplay systems, and production tools for designers within collaborative team projects, with a focus on clean architecture, profiling, and debugging. Graduated from **Digital Bros Game Academy** (Game Programming), with a computer science foundation in web, application, and embedded systems development. Trilingual (Italian, English, Arabic), with experience in hospitality that strengthened teamwork, communication, adaptability, and a strong customer-oriented mindset.

SKILLS

Programming: C++ and Blueprints · C# · Python · Java · SQL · HTML · CSS · PHP
Game Engines: Unreal Engine 5 · Unity
AI Systems: State Tree · Behavior Trees · Finite State Machines · EQS · A* Pathfinding · NavMesh · AI Perception
Gameplay: Gameplay Ability System (GAS) · Player Controller · Camera · Interaction · Designer Tools
Debugging & Optimization: Unreal Insights · Unreal Engine console profiling tools · Blueprint Debugger · Visual Studio and Rider debuggers · Performance Profiling · Performance Optimization
Software Engineering: OOP · Design Patterns · Modular Systems · Event-Driven Architecture · Multithreading · Client/Server Networking (TCP/UDP)
Tools: GitHub · GitLab · GitHub Desktop · Visual Studio · Rider · Fork · Trello · Miro · GitHub Issues
Certifications: ICDL Full Standard ↗ B2 Cambridge Certificate ↗

PROFESSIONAL EXPERIENCE

Segritude | AI Programmer | Oct 2026 - Present

- **AI programming** for **creatures**, **NPCs** and **bosses**..

GAME DEVELOPMENT EXPERIENCE

Goodbye Pongo ↗ | Unreal Engine 5.5 | Dec 2025 - Jul 2026 | Team of 14

3D puzzle-adventure focused on AI companion behavior and player interaction.

- **AI Companion** in C++ with **Behavior Trees, EQS** (custom C++ test), Smart Nav Links and an event-bus subsystem and interaction with the player.
- Built a data-driven, spline-based **camera system** with a custom **Slate** editor panel (multi-point editing, undo/redo, live preview)
- Procedural **Control Rig** look-at that distributes rotation across spine, neck and head.
- **Designer Tools** for Production, including a Static Mesh converter to Instanced and Hierarchical Instanced meshes with CPD compatibility, and puzzle utility components
- Profiled and debugged gameplay and AI systems with **Unreal Insights**, console profiling tools and the **Blueprint Debugger**.

Ramiel ↗ | Unreal Engine 5.6 | Global Game Jam 2026 - 48 hours | Team of 5

Third-person stealth game with mimic mechanic focused on enemy AI behaviors and perception systems.

- **NPC** enemy in C++ with **Behavior Trees** and **AI Perception**: patrol, investigation, chase, alert propagation and a detection meter.
- Player mimic and possession mechanics, melee combat, and charged attacks.
- Stealth interactions and gameplay loop.

Patch Me If You Can ↗ | Unity 2022.3 | May 2025 - Jun 2025 | Team of 11

First-person shooter focused on AI-driven enemies and perception systems.

- Built a modular **Finite State Machine** for NPC enemy (patrol, investigation, sight, hearing) with variable jump traversal.
- Optimized AI distance, sensory and stealth checks with the **Unity Job System**.
- Developed the camera, character and controller systems and a decoupled input system

Takaindest ↗ | Unity 2022.3 | Mar 2025 - Apr 2025 | Team of 11

Casual mobile local multiplayer game with split-screen mini-games, designed for landscape mode.

- Designed a **proxy-based, event-driven architecture** and a round system compatible with every mini-game.
- Integrated remote content loading with **Addressables** and **Unity Cloud Content Delivery**.
- First mini-game, the audio manager and the in-game currency system.

EDUCATION

DIGITAL BROS GAME ACADEMY | **Game Programming** ↗ (2024 - 2026)
- Specialized training in game development, focusing on game engines, gameplay systems and code architecture.

IT TELECOMMUNICATIONS DIPLOMA | **High School** (2019 - 2024)
- Strong foundation in programming, telecommunications, computer networks and electronics.

LANGUAGES

Italian: **Native** | English: **B2 (Cambridge Certificate)** ↗ | Arabic (Tunisian): **B1**

WORK EXPERIENCE

Waiter, Bartender (hospitality) | 2024 - 2025
Kitchen Staff (hospitality) | 2022 - 2023
Waiter, Bartender (hospitality) | 2021 - 2022

Milan, Italy (open to relocation worldwide) | +39 329 696 2364 | securenoteben@gmail.com ↗
Portfolio: hamzabensaidportfolio.netlify.app ↗ | LinkedIn: linkedin.com/in/hamza-ben-said ↗ | Github: github.com/HamzaBenSaid05 ↗