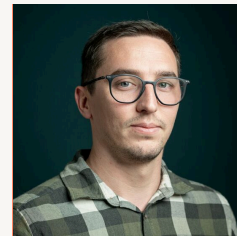# Samy MENA-BOUR

C++ Gameplay & UI Programmer | Unreal Engine 5

Based in France | Willing to relocate to Scandinavia | EU Citizen | +33 6 30 88 32 32

| samymenabour@gmail.com

Summary

Game Development student specializing in Modern C++ and Unreal Engine 5. Strong focus on Technical UI development, leveraging UMG and CommonUI to create scalable, cross-platform interfaces. Passionate about bridging the gap between technical design and engine performance. Currently seeking an internship or junior position within the Scandinavian gaming industry to contribute to world-class projects.

Work experience

Dread Night, Gameplay & UI Programmer   2025-12 - 2026-01
Game Academy, France

Technical UI & Systems Development

- **Architected and implemented** a comprehensive game UI using **UMG**, prioritizing responsive design.
- Developed a **dynamic data-binding system** to decouple UI logic from gameplay data, improving maintainability and iteration speed.
- Optimized widget performance through **Invalidation Boxes** and efficient event-driven updates to minimize Slate tick overhead.
- Designed and engineered a **scalable Interaction System** leveraging **UE5 Subsystems**, providing a centralized and decoupled architecture for complex world interactions.

Logicraft, Software Engineer   2024-01 - 2024-12
Game Academy, France

- **Architected an Event System** based on a **Subscriber/Callback pattern**, enabling decoupled and thread-safe communication.
- **Developed a UI Toolset** featuring automated button callback registration, significantly reducing boilerplate code and integration time for designers.
- **Engineered a multi-layered Scene Management system** integrated with a custom **Serialization module** for persistent world state and efficient save/load cycles.
- **Developed a Convex Shape Drawing system**, providing a flexible and intuitive alternative to standard SFML primitives for defining complex collision and trigger zones.

Enter the Lost Chamber | Lead Developer & Project Manager   2024-03 - 2024-04
Enter The Lost Chamber (Steam)

- **Project Management & Strategy:** Defined technical specifications and established a high-velocity roadmap to successfully meet a 100% production-ready status within a 6-week deadline.
- **Core Systems Architecture:** Engineered primary gameplay systems from scratch in C++, ensuring a clean, scalable, and memory-optimized codebase tailored for Steam release.

Skills

C++ (Standard)

- **Modern:** C++ (17/20) | OOP | STL
- **Core:** Smart Pointers | Memory Management
- **Design Patterns:** Composite | Factory | Singleton | Observer | Command

Unreal Engine 5 (C++ | BluePrint)

- **Technical UI:** CommonUI | UMG
- **Architecture:** Subsystems | Event-Driven
- **Systems:** C++/BP Integration | Optimization

C# | Unity

- **Advanced:** DOTS | UI Toolkit
- **Architecture:** Component-Based | Data-driven
- **Logic:** ScriptableObjects | Gameplay Scripting

C

- **Fundamentals:** Low-level Programming
- **Memory:** Pointers | Manual Allocation

Project Management & Soft Skills

- **Leadership:** Team Management (25+ people)
- **Production:** Lead Dev (Steam) | Agile Roadmap
- **Technical:** Specifications | Roadmapping

Tools & Environment

- **IDE:** Visual Studio | Rider
- **Version Control:** Git (GitHub)
- **Production:** Agile (Scrum) | Trello

- **Full UI Pipeline Integration:** Architected and implemented the entire game interface, including dynamic menus and HUD, while maintaining a seamless link between UI design and engine performance.
- **Release Management:** Oversaw the technical integration and optimization process to ensure build stability and compatibility for the Steam storefront.

Professional Baker   2019-04 - 2022-07
Marie Blachère

- **Process Discipline:** Demonstrated strict adherence to complex recipes and safety protocols, maintaining a high level of precision - directly comparable to following strict C++ Coding Standards and rigorous software architectures.
- **Performance under Pressure:** Managed high-volume production cycles in a fast-paced environment, requiring flawless organization and time management.

Shift Manager   2014-01 - 2019-02
Mac Donald's

- **Team Leadership (25+ People):** Directed a large team in high-pressure environments, fostering team cohesion and ensuring peak operational efficiency during high-traffic periods.
- **Process Optimization:** Streamlined production workflows to maximize global productivity, demonstrating an analytical mindset focused on identifying and resolving systemic bottlenecks.
- **Crisis Management & Troubleshooting:** Acted as the primary point of contact for real-time problem solving, maintaining clear communication and team focus during critical peak hours.
- **Operational Rigor:** Managed inventory, complex scheduling, and training programs with high precision.

Education

Master's Degree in Game Development   2022-09 - 2026-06
Game Academy, France

Associate Degree in Web Development   2019-12 - 2020-03
3W Academy, France