

Paul Stefanescu

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Professional Summary

C++ software engineer with over 4 years of experience developing and maintaining high-performance, real-time systems in complex, large-scale codebases. Proven ability to design efficient and lightweight runtime logic with a large focus on robustness and extensibility while delivering stable releases under tight time and quality constraints.

Experience

SOFTWARE ENGINEER | CODEMASTER, ELECTRONIC ARTS | MAY 2022 - PRESENT

- **Formula 1 Video Game Franchise - Ego Engine - C++**
 - Created the **Dynamic Objectives** system - a lightweight system that analyses player actions, the current state of the race, and offers customized goals.
 - Participated in the **full development cycle**, including planning, design discussions, cost estimations, back-and-forth iteration, and bug fixing.
 - Integrated new features and changes into the complex 15-year-old codebase while ensuring build stability.
 - Daily development relies heavily on **system design, reverse engineering and communicating effectively** with other teams and disciplines.
 - Gave internal **talks** and **presentations** on new technology and cross-discipline features within the game

JUNIOR GAME PROGRAMMER | WUSHU STUDIOS | JULY 2021 - JANUARY 2022

- **Destruction Allstars - Unreal Engine - C++**
 - Worked collaboratively with a small team. Adapted quickly to working remotely by building strong professional working relationships.
 - Refactored User Interface code with an emphasis on future-proofing and good coding practices.

GAME PROGRAMMING INTERN | D3T LTD | AUGUST 2019 - AUGUST 2020

- **Mafia 2 Definitive Edition - Proprietary Engine - C++ - 2K Games, Hangar 13**
 - The only programmer assigned with adding new content to the game.
 - Tasks relied heavily on **reverse engineering**, knowledge sharing within the team, and a good understanding of the 2007 game code.
 - Implemented crucial fixes for game-breaking bugs, **repaired the build pipeline** for localisation and identified and reinstated missing assets.
- **The Callisto Protocol - Unreal Engine - C++ - Striking Distance Studios**
 - Developed the blood & gore system as part of a small team.
 - Implemented **engine** and **editor** changes to help the collaboration between programmers and artists.

Education

B.SC. COMPUTER SCIENCE | JUNE 2021 | UNIVERSITY OF MANCHESTER

- **Final year university project:** Third Person Multiplayer Arena Shooter with 3D environment procedurally generated at run-time in **Unreal Engine**
- **Implemented features, fixed bugs, and refactored code** on a large open-source MMORPG in Java.
- Designed a **reinforcement learning** bot to play and win a real-world game (Mankalah)
- Created a Pub Quiz web application on AWS, from initial pitch and design to final implementation and deployment.

Technical & Soft Skills

PROGRAMMING LANGUAGES

- C/C++ | C# | Python | Java

TOOLS & PLATFORMS

- Perforce, Unreal Engine, Unity, Jenkins CI/CD pipelines, Visual Studio

COMMUNICATION

- All my work relies heavily on effectively communicating with different teams across the business as well as maintaining an effective iterative process between me and the respective designers of the feature I'm working on.

TALKS & CONFERENCES

- I've given talks both internally and externally on the features I developed, highlighting the core implementation, challenges faced along the way and how I've tackled them.
- I attend conferences & technical talks to broaden my knowledge and discover new technologies and perspectives.

Passion Projects

CYBERRUN - UNREAL ENGINE - C++

- An Unreal Engine 5 reproduction of the mobile game Temple Run with a sci-fi theme. Focused on learning the ins and outs of the new engine version.

GRAVITY SHIFT - UNITY - C#

- 2D Space Racing game in which you have to traverse a racetrack using the gravitational fields of different planets, being able to activate and deactivate their gravitational pull.

PLATFORMER - UNITY - C#

- 2D Arena Fighter game, the goal being to push the other player off the map by shooting him with knock-back projectiles, their power increasing with every hit.