# Fabio Pereira

Unreal Engine Developer & Game Programmer

Unreal Engine developer with over four years of experience building 3D games and interactive experiences. Proficient in both Blueprints and C++, with a strong understanding of the full development pipeline, including implementing models, materials, lighting, animation, audio, and VFX. Experienced in prototyping and developing for VR and desktop, with projects spanning training simulations and entertainment experiences. Adaptable team player, effective in cross-disciplinary environments, and committed to delivering engaging, high-quality experiences.

#### Skills

- Engines & Languages: Unreal 4 & 5, Unity, C++ and C#.
- Software & Tools: Perforce, Github, Bitbucket, Unity Version Control (Plastic SCM), SourceTree, Jira, Confluence, MS Teams, Miro, MS Office, Visual Studio 2022, Notepad++, Visual Studio Code, JetBrains Rider.
- Other Knowledge/experience: Python, Batch File, JSON, Video Editing, Photo Editing.

## **Professional Experience**

Intern → Junior Unreal Developer | SimCentric | June 2022 – October 2023

Prototyped and was a key developer on three VR products, targeting the Quest 2, for global allied militaries utilizing Unreal 5.0 technology. One was showcased at <a href="I/ITSEC">I/ITSEC</a> 2022.

- Collaborated with team to determine application requirement specifications.
- Contributed ideas and suggestions in team meetings, and delivered updates on deadlines, designs, and enhancements.
- Translated technical concepts and information into terms parties could easily understand.
- Key developer on prototype project and successfully delivered it to the client.
- Created a Json file loading system, so clients' data can be customized and confidential.
- Designed a procedural animation system to illustrate a military operation; I worked closely with the senior producer, and we devised a development pipeline.
- Wrote VR tutorials and documentation for codebase and knowledge transfer to Junior and Intern Unreal Developers.
- Explored Unreal's source code to fully integrate my systems and designs.

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### **Projects and Initiatives**

#### My Indie Game Company

Unreal Engine Developer & Producer | Red Rat Games | April 2024 – Present.

Me, three other co-founders, and three part-time developers are developing desktop games in our studio. We are focusing on publishing a first-person, stealth-based horror game set to be the first episode in a series inspired by Fears to Fathom and Poppy Playtime.

- Developed AI behaviours using Unreal's Behaviour Tree, Tasks, Decorators, Services, and AI Controller. Created a monster that's responsive, can see and hear the player, and can see their flashlight down corridors.
- Created new Collision and Trace Channels and Profiles, improving engine collision and simplifying event code.
- Created engine tools: a player debug menu able to change values at runtime and a consol command toolbox using buttons to execute common debug commands.
- Leveraged Unreal's debug classes Debug manager, Debug camera, and Spectator Pawn — allowing team to make default cheats such as invulnerability and infinite stamina, and to have access to a flying camera during runtime.
- Iterated on artistic effects such as IES Lighting profiles, colour grading LUT profiles, and post-processing to create atmosphere and mood.
- Collaborated on player controllers for <u>God's Spear</u> and Mont Blanc: Head bob. sprinting, stamina, crouching, sliding, launching, and grapple hook.
- Role included production and team leading: organised Jira, created stories and tasks, created sprints, customized issue components, edited timelines, estimated work, wrote source control guide, completed weekly statues updates, stopped feature creep, mediated discussions, stopped development stagnation and pushed tasks forward.

### Uni/Personal projects

- VR plugin and project. <u>Coded climbing, character controller, physics interactions, and components</u> to create VR assets with. Created VR prototype of a <u>train level from Uncharted 2</u> and a <u>VR horseback</u> archer prototype with ragdoll enemies. My VR, <u>gunrange game</u> got demoed at Guildhall game fest; roughly 100 people played it!
- Participated in 5 game jams. Developed FPS mechanics, Al, and experimented with networking in Unreal. Coded gameplay assets for designers, lead the teams and delegated tasks, and managed and taught source control.

### Education

#### **University of Portsmouth**

BSc (Hons) Computer Games Technology — First-class honours. Achieved 92% in first-year C++ programming module. Achieved 90% in second-year program consoles module. **Havant and South Downs College** B-Tech I.T. — D\*D\*D\*

C- Tech I.T. — D\*