Loïck Rivemale

Unity Developer – Code & Visuals

My website
LinkedIn
GitHub
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"Bringing creative solutions to 3D software, from aerospace to VR filmmaking"

EXPERIENCE

RETìníZE, Belfast, UK — *Unity C# developer*

February 2023 - March 2025 (Freelance developer)

November 2020 - October 2022 (Full-time employee)

- Was one of the developers of **Animotive**, a Unity-based VR movie production tool for real-time 3D motion capture and video rendering.
- Developed a GPU-based, collider-less raycast system for submesh detection.
- Wrote Animotive's in house custom shaders and render features while optimizing its rendering pipeline for complex VR scenes.
- Built and maintained a complete UI toolkit for VR.
- Took part in evaluating and integrating full-body tracking systems, including Vive trackers and Xsens.

Airbus Defense & Space, Toulouse, France— *Unity C# developer*

July 2017 - June 2020

- Was one of the developers on Airbus Group's internal VR visualizer (**DragonFly**).
- Built a procedural shape generation library and two TCP interfaces in C# and Java using Protocol Buffers to connect DragonFly with external softwares.
- Developed a double-precision solar system simulation and satellite telemetry visualizer to support DragonFly's adoption by Toulouse Mission Control center.
- Managed client relationships, roadmaps, and demos for projects integrating DragonFly into other teams.

VisioPM, Toulouse, France— *Unity C# developer intern*

April 2016 - August 2016

- Built a WebGL player to enable customers to import images and files into the company's rendering pipeline.
- Built a proof of concept for an Unity-based autostereoscopic rendering engine.

STUDIES

Epitech, France— *Master's Degree in Software Engineering*

2013 - 2018

Beijing Jiaotong university, Beijing, China - *Computer science*

2016 - 2017

Saint Joseph High school, Rodez, France— Baccalaureate *STI2D*

2010 - 2013

PRIMARY SKILLS

- C#
- Shaderlab (HLSL)
- Shader graph

- Unity
  (URP, HDRP, custom RP)
- Git
- Photon Bolt

- Mathematics
- GPU acceleration
- Render features
- Procedural generation
- Editor tooling

WORKING KNOWLEDGE

- C
- C++
- Java
- Javascript

- Blender
- Photoshop/Photopea
- Gaea
- Linux

- TCP/UDP networking
- Protocol buffer
- WebGL
- SQL
- WPF

LANGUAGES

English : Professional fluency

French : Native