ROXANE VALLÉE

VIDEO GAME PROGRAMMER

roxanevallee@outlook.com

https://roxyvallee.github.io/
https://fr.linkedin.com/in/roxane-vallée

Video game programmer for 4 years, I'm dedicated to the art of creating captivating interactive worlds. My experience revolves around game development, using a variety of languages, with particular proficiency in C# and mastery of the Unity tool. My strength lies in my ability to juggle multiple tasks, ranging from conception to implementation. I'm adaptable, always ready to immerse myself in new technologies to keep up with the fast-paced evolution of the video game industry. My passion for solving technical and gameplay issues has enabled me to efficiently identify and overcome challenges. Concurrently, my creativity guides me in designing innovative game mechanics and crafting engaging experiences for players.

TECHNICAL SKILLS

Programming Languages
C#, C++, Java, PHP, PYTHON, LUA, C, JavaScript, HTML, CSS

Tools and Platforms
Unity, Unreal Engine 5, GIT, Lens Studio, OpenGL

PROFESSIONAL SKILLS

Languages
- French : Native language
- English : Fluent (advanced level) in reading, writing and oral communication
- Japanese : Beginner-intermediate (5 years of learning)

PROFESSIONAL EXPERIENCE

Unity Programmer   April 2023 - Now
Les Studios Persistant, Montréal, QC
VIE (Volontariat International Entreprise) experience at Les Studios Persistant, a canadien branch of Apperture, a digital agency specializing in virtual reality, augmented reality, and applications, based in Montreal.
- **Developed a 2D game editor tool** in Unity and C# to assist game designers in managing and creating cards. Used of the Unity UI Toolkit plugin for the editor's creation.
- **Developed an application** in Unity and C# connected to a GlamBot robot. Developed a batch file that processes video data captured by the robot and sends it via PHP email to the user. Managed various video settings, such as add slow motion, integrate introduction video, add audio, and image in overlay.
- **Developed a prototype** in Python and C# for a photo booth at an event, used of machine learning algorithm to detect the presence of a Vespa scooter in a photo and embed it into a background.
- **Maintenance of customer mobile applications,** integrating new UI elements, integrating Firebase for analytics and adding new languages to Unity localization. Regular release of iOS and Android builds to update the application on the various mobile platforms.

Unity Programmer   January 2022 - March 2023

Apperture, Paris, FRANCE

Digital agency specializing in virtual reality, augmented reality and applications based in Paris, Bordeaux and Montréal.

- **Developed a 3D investigative video game** prototype using Unity and C#. Established the game loop architecture and crafted various gameplay elements such as dialogues, character physics management, quest system, and consequences.
- **Created a virtual reality application using Unity and C#** to simulate the symptoms experienced by individuals with myasthenia, an autoimmune disease disrupting communication between nerves and muscles. Developed VR interactions to simulate blurred vision, heavy arms, and speech difficulties.
- **Designed a mini-game using Unity and C#** for an interactive connected dartboard. Integrated different game rules based on the dart's position on the board, number of players, and turns.
- **Developed a virtual reality application** for 360-degree videos on Unity and C# for a Chanel event. Integrated a playlist of 360-degree videos and designed interactions for the Oculus Quest 2 headset.

Mobile Game Programmer (Augmented Reality)   April 2021 - December 2021

Flat Pixel, Paris, FRANCE

Game studio based in Paris dedicated to crafting visually stunning and innovative games using cutting-edge technologies.

- **Developed a prototype for a mobile augmented reality application** using Unity and C# for Nickelodeon. Integrated the UI interface, established the application architecture, and incorporated augmented reality using ARCore, ARFoundation, and ARKit.
- **Developed an augmented reality filter** for the Eiffel Tower on Snapchat using **LensStudio** and JavaScript. Developed gameplay elements, tower Eiffel detection, and interactions within the filter.
- **Managed maintenance** for Nickelodeon's DO NOT TOUCH mobile application on Unity and C#. Integrated new client requests from Nickelodeon and resolved errors identified during QA testing.
- **Designed augmented reality mini-game filters** for Nickelodeon's DO NOT TOUCH application using Unity, C#, and Lua. Developed the gameplay mechanics for the mini-game and utilized ARCore, ARKit, and ARFoundation for facial detection in augmented reality.
- **Developed a prototype in augmented reality** using Unity and C# for a shooting game employing LIDAR on ARKit. Conducted research and development on implementing triplanar mapping to embed paint splatters in the scanned environment using LIDAR in augmented reality.

Project Manager and Unity Programmer   June 2020 - August 2020

La Méduse Violette, FRANCE

Storytelling agency in Angoulême and Toulon, specializing in enhancing brand narratives for its clients.

- **Led a project as both project manager and developer** for an interactive augmented reality application using Unity and C# for the Château de Sainte Roseline. Proficient in project management and organization, learn in storytelling techniques, and developed augmented reality interactions integrating 3D content.

COMPLEMENTARY EXPERIENCE

Game Jam GMTK23 Participant   July 2023

The GMTK Game Jam is an annual game creation marathon where individuals and teams strive to develop a game based on a given theme within a strict 48-hour timeframe.

- Led the game design and gameplay loop implementation for the game.
- Organized and distributed tasks effectively within the team.
- Implemented a robust, fast, and reusable code architecture.
- Ensured the project was completed within the allocated timeframe.

Speaker at XP Game Summit Toronto   April 2023

Selected by Women In Games France to showcase my company's video game project at this conference focusing on the video game industry's business aspects.

- Speaker in a panel discussion concerning the role of women in the video game industry.
- Presented my company's new video game prototype to publishers.
- Managed and organized the demonstration booth for my company's video game prototype.
- Networked within the Canadian video game industry.

Participation in Women In Games France Mentorship   December 2022 – June 2023

Women In Games France is an association of professionals working towards gender diversity in the French video game industry. The WIGROW mentorship program aims to connect a mentor with a mentee to assist in their professional development within the gaming industry.

- Met and had discussions with my mentor to define my goals.
- Engaged in collaborative projects and game jams to enhance my personal initiatives.

EDUCATION

Master's Degree in Engineering, Specialization in 3D Programming   2018 – 2021

IMAC, a public engineering program combining Arts and Science,
ESIPE, Champs-sur-Marne, FRANCE

Exchange semester at Concordia University, Montreal, CANADA   September 2017 – December 2017

Semestre d'échange dans le cadre du cursus
avec Efrei Paris

Bachelor's Degree in Mathematics and Computer Science   2015 – 2018

EFREI Paris, a generalist engineering school focused on computer
science and digital technology, Villejuif, FRANCE