



# BREON PAUL

APRENTICE IN RESEARCH AND INNOVATION IN XR  
MASTER DEGREE STUDENT AT CESI

## PROFILE

IMy work focuses on exploring innovative virtual and augmented reality solutions in an educational and industrial setting and in AI. I also like to develop short video games (see on my GitHub and have fun).

## WORK EXPERIENCE

**CESI LINEACT** SEPTEMBER 2023 - PRESENT  
Apprentice in research and innovation in XR

- Develop and deploy an application for students to learn how to use a robot by using the Digital twin of this robot in an immersive environment in Virtual Reality.
- Create a package in Unity to generate multi-point of view datasets using an immersive environment in virtual reality to recognize human actions.

**University of Lille at CRIStAL** SEPTEMBER 2025 - OCTOBER 2025  
Intern in ALGOMUS' team for music analysis

- Develop multiple way to make real-time analysis of music using MIDI flux by developing algorithms (Oracle factor, Suffix Automaton, FFT (Fast Fourier Transform)).

**ELTE Eötvös Loránd** JULY 2025 - SEPTEMBER 2025  
Intern in AI and Gaussian Splatting research

- Work on Gaussian Splatting creation from real or synthetic datasets.
- AI processing to generate gaussians with synthetic and real datasets.

**CESI LINEACT** April 2023 - July 2023  
Intern in research and innovation in XR

- Develop a tool to instantiate a communication between ROS and Unity (ROS is one of the most use frameworks for robots and Unity the current 3D engine we are using in CESI LINEACT to create XR environments).

## VOLUNTEERING

**CESI Volunteering** DECEMBER 2021 - PRESENT  
Manager of associations in the school and member of some of them

- Manager and team leader in the associations part in the Student Office (Management of budget and equipment, communication between the School and the students).
- Chairman of the music club since 2022 (Management of budget and equipment).
- Member of the VR club, Robotic club, Drawing club.

**MUSIC Volunteering** NOVEMBER 2015 - PRESENT  
Conductor and drums player

- Office member of the association since 2024.
- Conductor in the junior ochestra since 2023.
- Drum leader in the orchestra since 2019.
- Drum player in orchestra since 2015.

## CONTACT

+33 7 78 32 07 54

paul.breon@viacesi.fr

Rouen France



## EDUCATION

2021 - 2026

**CESI ENGINEERING SCHOOL**

Engineering in Master Degree in  
Computer Science :

- C#, C++, C, Python oriented object programming.
- WEB with HTML, CSS, PHP, JS.
- System administrator and networking.

2019 - 2021

**HIGH SCHOOL**

- High School graduate with mention in Math and Physics.

## SKILLS

- Unity, C#, C++, Python, 3D Engine
- Virtual Reality, Mixed Reality, Augmented Reality
- Window, Linux (graphical or not)
- Project Management
- Teamwork
- Time Management
- Critical Thinking

## LANGUAGES

- French (Native)
- English (TOEIC 700)
- Spanish (Intermediate)
- German (Basics)