Wilhem Barbier



Education

2020-2022 **MSc in Computer Science**, Ensimag, Grenoble, (Mathematical modeling, vision, graphics and simulation track)

2020 BSc in Mathematics and Computer Science, Université Paul Sabatier, Toulouse

Experience

Internships

February- Real-time graphics research, Unity Grenoble

August 2022 This internship hasn't started yet.

June- Lipsync animation generation, YAAARGames/ZEILT Productions

September I worked on generating lipsync animation from audio and text. I also helped on

2021 a production on rendering issues, pipeline automation, and other tasks.

Skills: C#/Unity, Python/Maya

January-May Part-time research project on real-time GI, Maverick lab, INRIA

2021 Grenoble

I implemented a real-time global illumination method based on lightmap interpolation. I was supervised by Cyril Soler (INRIA Grenoble) and collaborated with Laurent Belcour (Unity Grenoble).

Skills: C++, rendering research

January- Efficient sampling of energy transitions in the atmosphere, August 2020 STORM lab, Institut de Recherche en Informatique de Toulouse

I developed an algorithm to efficiently sample the energy transitions occurring in the atmosphere. It was used to accelerate the convergence of a Monte Carlo estimator of atmospheric absorption.

Skills: C++, Monte Carlo estimation, algorithmic thinking, independent research

Summer Retina Pictonique project, SMAC lab, Institut de Recherche en Infor-

2019 matique de Toulouse

I contributed to the development of an interactive exhibition.

Skills: Java, GUI programming, shader programming

Personal projects

C++ Real-time renderer (OpenGL)

C++ Path tracer

See my website https://wbrbr.org for more details and other projects

Skills

Languages: C++, C, Java, Python, GLSL

OpenGL

Languages

French Mother tongue

English Professional (B2 level)