



# Paul-Élie Pipelin

*Engineer in digital imaging, 28 y.o., Car license*

## EXPERIENCES

- May 2022 – **Research Engineer - Rendering**, MATEREAL, Lyon, France.  
March 2024 Measurement of spectral SVBRDF of materials.
- March 2021 – **R&D Engineer - Rendering**, IMAGE ENGINE, Vancouver, Canada.  
April 2022 Programming of **tools** for artists, maintaining current softwares (e.g. tools for *Gaffer*, *Arnold Renderer*, *Nuke*, *Maya*). Work on the **assets management** proprietary software and its combining with the render farm. Work on the **link between Gaffer and Arnold Renderer**. Participation on *Gaffer* open source software.
- March 2020 – **Programming internship**, ANSYS OPTIS, Toulon.  
August 2020 Work on a plugin to integrate physically realistic and parametrizable BSDFs. Automation of tests for physic validation, integration of default samplers and adding of new materials.
- October 2019 **Industrial project, Implementation of an Optimal Multiple Importance Sampling (OptiMIS) for Bidirectional Light Transport Simulation**, ESIR, CORONA RENDERER, Rennes.  
– February 2020 Received the **innovation award**.
- June – **Research internship in Indoor Localization**, LIMU - KYUSHU UNIVERSITY, Fukuoka, Japon.  
August 2019 Implementation of an **indoor localization** framework based on bluetooth beacons (BLE) and map constraint.  
(~3 mois) **First prize** in IPIN's 2019 competition (Track 5).
- 2017 & 2018 **Internship 1 in Research Laboratory and Internship 2 at Capgemini**, Rennes.  
November **First and Second prizes of the Insomni'hack Hackathon (~24h) organised by Epine with Capgemini**, ESIR - EPINE - CAPGEMINI.

## EDUCATION AND CERTIFICATION

- Since April 2024 **PhD student**, MATEREAL AND LTDS, Lyon, France.
- 2017 – 2020 **Engineering Cycle at ESIR in Digital Imaging**, ÉCOLE SUPÉRIEURE D'INGÉNIEURS DE RENNES, Rennes.  
○ Image: **Image Synthesis**, *Mathematics for images*, **Advanced Image Processing**, *Human Machine Interface*, *Classification*, *Special Effects*, *Compression*  
○ Humanities: *Communication*, **fluent English**, *Management*, *Innovation*
- April – **Handimanager certified**, COMPANIEROS ASSOCIATION.  
October 2018 Involvement and organization of a crowdfunding financed project to teach the management of disabled persons to engineering students.

## TOOLS FOR COMPUTER SCIENCE

- Languages **C++**, **Zig**, **Python**, Java, Web (front / back)  
Technologies **Matlab**, **OpenCV**, OpenGL, **Unity**, Angular  
Tech VFX **Blender**, **Gaffer**, **Arnold Renderer**, Iray, Nuke, Maya, OSL  
Systems Windows, GNU/Linux  
Others Adobe Suite, Office Suite, Git, Github, Lightroom, L<sup>A</sup>T<sub>E</sub>X

## HOBBIES

Sciences, New technologies, Chess, Photography, Music, Cinema, Video games, Sport