

Erwan VIVIEN

Engineering student in Computer Vision and Computer Graphics at EPITA



Education

EPITA 5th year, Paris

- Computer graphics major (image rendering / processing)
- International section
- Programming teaching assistant

TOEIC, score 920

Work Experience

EPITA, Paris – Teaching assistant

Sept. 21 – Now

Selected to teach 3rd grade students C, C++, Java and JavaScript. In a team of 45, the role demands preparing subjects and exercises for over 800 students.

Expleo group, Dublin — Software developer

Sept. 21 – Feb. 22

Tool creation to **assist pentesters** in finding and patching vulnerabilities. Gathering, saving data to automate redundant checks, verifying if the cybersecurity vulnerability has been patched.

CareGame, Paris – Software developer

June 20 – July 20

Manipulating **GStreamer's** pipelines to add a timestamp to an input video stream. Processing the output's timestamp by integrating **Tesseract OCR** in order to estimate the streaming latency.

Projects – All on GitHub

QRCode Generator – Rust

[erwanvivien/fast_qr](#)

Implementation of ISO 18004 on my free time, with focus on CPU optimizations and WASM. This library is **~9x** faster than the standard Rust QRCode library

Raytracer – Rust

[erwanvivien/isim_raytracer](#)

Reflections, shadows, configurable scene using JSON. Can draw rectangles, spheres, planes and any recursive shape (Menger Sponge...)

Video Codec – Python

Educational implementation using macroblocks algorithm

Harris corner Detect. – Cuda

[Lycoon/harris-cuda](#)

C++ and GPU implementation. Using GPU provided a x20 speedup

Fast-QR.com – Rust / NextJS

The website associated with the QRCode Generator. The web page is optimized to reduce load time

Tiger Compiler – C++

Parser, bindings, type checker, and LLVM transpiler for Tiger language

Chess move calculator – C++

Fast chessboard implementation using magic bitboards and min-max move predictor – @2400 elo

Qify – Rust / NextJS

Shared jukebox using Spotify API. Everyone can queue songs, while having one paid Spotify account

Windows Win32API – C++

Hacking Windows event loop, allowing to play multiple games simultaneously

Socials

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Linkedin: [erwan-vivien](#)

Github: [erwanvivien](#)

Online CV: [xiaojiba.dev/CV](#)

Skills

Programming languages

Rust, C++, C (Expert)

C#, Python, Java, JavaScript,

TypeScript (Advanced)

Utilities

Git, Bash/Shell, NextJS (Expert)

CUDA, Unity (Advanced)

Business Skills

Analytical, Communication,

Teamwork and collaboration,

Leadership, Autonomy

Languages

French – Mother tongue

English – Fluent

German – Basic

Chinese – Basic

Interests

Wall climbing

Open source

Sorting algorithms