



Skill Domains

Computer graphics specialization:

- ✓ Signal processing
- ✓ **Computer Graphics:**
 - Geometric modelling: Subdivision/simplification, parametrization; Parametric and implicit surfaces, deformable geometry; 3D reconstruction
 - Real-time rendering: Lighting modelling and simulation; Appearance analysis and synthesis, SFX; GPU programming (OpenGL/Vulkan)
 - Animation: skeleton, dressing, collision detection and management; Laws of motion; Direct/inverse kinematics
 - Game design: Usability of interactive systems; UX in games
- ✓ Image analysis and processing and Computer vision
- ✓ Analysis and synthesis of sound and digital video environments

Computer Sciences

- ✓ **System:** System Primitives, Parallelism (heavy/light processes, OpenMP, SIMD, CUDA), MIPS Assembler
- ✓ **Development:** Software engineering, Design Patterns, UML, UI Conception, Security, Debug (gdb, valgrind)
- ✓ **Algorithms:** Data Structures, Graph Theory, Languages and Automata, AI
- ✓ **Networks:** Architecture, Sockets, Network and Transport Layers, Routing
- ✓ **Databases:** SQL, Entity-Relationship Model, Relational Algebra, Normalization, Optimization
- ✓ **Languages:** C, C++, Python, C#, Rust, Java, OCaml, Matlab, JavaScript, HTML/PHP/CSS

Personal experience

- ✓ **Development:** video games¹ (Godot, Unreal, Blender, Gimp/Krita), browser add-on²
- ✓ **System administrator** of self-hosted yunohost server serving static site and development team services

Work Experience

Since 2021 **Independent game development and studio inception**

Godot 4 development, level editor, compute shaders, game design document, hosting and maintaining project tools

October 2021 – October 2022 **C++/C# Development Engineer** at RDF / Thalès S&T – Terressac, Tarn

Distributed military training simulators development under BISim VBS3/VBS4, using HLA and DDS

March 2019 – December 2020 **C++ Cross-Platform Developer** at Feral Interactive – London

Total War: Rome Remastered (April 2021); **Dirt 4** (April 2019)

Linux and macOS development, Front End UI development, Sprite Export Pipeline, Bug fixing

November 2016 – June 2018 **Consultant Student** at the junior enterprise Upsilon (Toulouse III – Paul Sabatier)

Take part in professional interviews, Lead client meetings, Translate functional requirements into specifications

March 2015 – June 2015 **Bioinformatics Technician** (3 months internship at the term of DUT)

“Assembly of a pipeline for the analysis of pathogenic bacteria by high throughput sequencing”

at Bacteriology Laboratory of G. Montpied Teaching Hospital at Clermont-Ferrand

Develop in Python, Integrate the state of the art, Type genetic sequences, Detect genes

Education

2017 – 2019 **Master’s degree: Computer Graphics and Image Processing (“IGAI”)**

at the University Toulouse III – Paul Sabatier (31 – Toulouse)

2015 – 2017 **Bachelor’s Degree: Computer Science**

at the Universities of Strasbourg (67 – Strasbourg) & Toulouse III – Paul Sabatier (31 – Toulouse)

2013 – 2015 **2 years technical degree (“DUT”) Biological engineering, Bioinformatics option**

at Aurillac’s branch of the IUT of Clermont-Ferrand (15 – Aurillac)

Languages

English

C1 – TOEIC: 895/990 (2015)

Japanese

A2 – Former academic project

Spanish

A2 – High school level

Certifications

Driving Licence (2010) **IT&Internet Certificate lv.1** (“C2I”: 2014) **Civic rescue lv.1** (“PSC1”: 2015)

Hobbies

- Monitoring:** FOSS ecosystem, Computer Graphics, Video game industry, Net neutrality, IT security
- FOSS Contrib:** « Lutris », « Godot » add-ons; personal branches for « yunohost » packages, « Nuclear », « music-player » rust crate
- QA:** Bug Testing & Reports: « Rodina », « Quadrilateral Cowboy », « Caravan SandWitch »
- Music:** Bass music production, DJing, Guitar, Violin
- Sports:** Inline Skating; Former Flat Track Roller Derby Non-Skating Official
- Translation:** English → French: « Dex », « Hacknet » (games); « Computerphile » (videos)