THOMAS MORENO COOPER

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Personal Profile

I am a computer science master's graduate with a uniquely specialised skillset looking for an entry-level programming role in the games industry. From a broad academic background with strong maths skills, I have thrived in a coursework intensive course, specialising in efficient, low level and computer graphics programming designed to meet the industry's needs.

Skills

- C++/C, C#, Python, GLSL, CMake, JS/Html/Css, MATLAB
- Vulkan, OpenGL, ImGui, Qt
- Visual Studio, Unity, Blender
- Windows/Linux development
- Game Engines, 3D computer graphics
- English (native), French (native), German (B1)

Education

Computer Science with High Performance Graphics and Games Engineering (Meng, Bsc) - 1st **(2017-2021)**
School of computing, University of Leeds, UK

Baccalaureat Scientifique spécialisation mathématiques, option OIB – 16/20 **(2014-2017)**
Lycée Georges Duby, Aix-en-Provence, France

Projects

● **Raven Game Engine** (academic) – For my master's project, I led a 5-person team in building a C++ 3D game engine from scratch, which won first prize in the game technology category at the 2021 games republic student showcase.

● **Protein Visualiser** (academic) – For my undergraduate thesis, I explored the application of game technologies to aid research in biochemistry, creating a protein visualiser using the Unity game engine.

● **Can't Wait** (personal) – Can't Wait is a physics-based game released for the 49th Ludum Dare game jam. Players control a waiter who must navigate a restaurant and avoid contact with the environment.

● **Vulkan deferred renderer** (personal) **–** Extending a pieced of 4th year coursework, I built an application to view 3D models with physically based deferred rendering, shadow mapping and a skybox using the Vulkan API.

● **Coursework** (academic) **–** During my 4th year, I implemented mesh deformation, forward/inverse kinematics, particle cloth and fluid simulations, a ray tracer, accelerated mesh data structures with simplification/subdivision, terrain rendering, deferred rendering. I am always researching these projects in my spare time, trying to optimize them where possible and exploring alternative implementations.

Employment & Volunteering

Front-end Web developer **(04/2020 – 10/2020)**
I worked with architecture and humanities academics and produced websites to showcase their projects. I learnt to write JS applications, design websites, discuss design ideas, present deliverables, keep timesheets and log my activity, all the while working on my undergraduate thesis.

Module technical assistant (C++) **(11/2020 – 12/2020)**
As an assistant for the User Interface module I lead regular drop-in sessions for 2nd year students on Teams, answering students' questions, giving UI design tips and sharing my C++ knowledge.

Student ambassador for the School of computing **(2018 – 2019)**

Volunteering as a French teacher for the university **(02/2018 - 04/2018)**
I lead a class of 20 students, ranging from other undergraduates to university staff, teaching the basics of the French language and introducing them to French culture. It was up to me to come up with a class structure for which I organised debates, speaking exercises and video presentations.

Reference

Dr. He Wang, H.E.Wang@leeds.ac.uk