# Marc Ducret

Game Developer, Software Engineer and Computer Scientist





# **EXPERIENCE**

**Fivemid**, Paris, France — Co-Founder

C#, Unity Complete development of Dice Kingdoms, a multiplayer strategy game released on Steam and built with Unity. Clean code and architecture enabled great productivity

as the only programmer of the project. Combat system that simulates hundreds of units in a deterministic and performant manner. Well recieved by players, with more than 200 "Very Positive" reviews.

**AyoLab**, Paris, France — Backend Developer September 2019 - March 2023

Design, implementation and maintenance of micro-services. Built systems to recognize products based on text and images on e-commerce websites.

**BlueCargo**, Paris, France — *Industry Internship* April 2019 - August 2019 Python, C# and Jav Python, C# and Java

Simulation and optimization in container ports. Built simulation and visualization tools to evaluate and design optimizations of port operations.

**USC**, Los Angeles, USA — Academic Internship March 2018 - August 2018 — Python and Ja Python and Java

Developed a platform for large scale multi agent deep reinforcement and imitation learning in Minecraft. Designed learning environments and ran experiments, under Fei Sha's supervision.

**Slimevoid**, France — Co-founder

2011 - 2013

An unofficial organization about creating mods for Minecraft. Our "Little Blocks Mod" was downloaded over a million times.

#### **PROJECTS**

**Portfolio** — marc.ducret.io

Some of the projects I am the most proud of.

#### **EDUCATION**

**"MVA" Master, Paris, France** September 2018 - August 2019

"MVA" stands for Mathematics, Vision and Learning and is reputed master program in machine learning with a mathematical approach.

École Normale Supérieure, Paris, France September 2016 - August 2019

Bachelor's degree in Computer Science (with 16.5/20 avg. grades). First year of Master's (with 17.4/20 avg. grades).

Lycée du Parc, Lyon, France — "Classes préparatoires"

September 2014 - July 2016

Two intense years to prepare entry contests for prestigious schools. I spent my first year in "MPSI" and the second in "MP\*".

Baccalauréat Science, Villefontaine, France

Highest honors, 20/20 in Mathematics, Physics and Engineering E-sports and cinema.

#### **PERSONAL**

Born in 1996. Located in Paris, 75006. +33 6 05 35 84 00 marc.t.ducret@gmail.com

# **SKILLS**

**Programming** since **2008** in various languages: **C#**, **Java**, Scala, Python, C++, GLSL, Rust, OCaml, Lisp.

Diverse technologies: Unity, Unity DOTS / ECS, Shaders, OpenGL, TCP, PostgreSQL, PyTorch, Tensorflow, Kubernetes, Keras, Android.

Clean code and efficient collaboration.

Fluent in English and French.

**Computer** understanding from CPUs' circuitry to compilation and OS development (with in-depth school projects).

Theoretical science in mathematics, computer science and physics. In particular: Complexity, Cryptography, Compilation, Optimization, Machine Learning, Neural Networks, Computer Vision.

Usage of LaTeX, Blender, Photoshop, Premiere Pro.

# COMPETITIONS

"Coupe de France de robotique" junior

 $28^{th}/61 - 2014$ 

French national programing contest "Prologin"

4<sup>th</sup>/81 — 2013

11<sup>th</sup>/94 - 2017

"Ludum Dare" Game Jam

**67**<sup>th</sup>/3000 — Innovation — 2017

**225**th/2500 — Overall — 2019

Google CodeJam

2<sup>nd</sup> round (top 4500) — 2019

# INTERESTS

Game development from conceptual design to implementation.

3D simulation and visualization tools. Rendering.

Competitive or creative video games.