# **Marc Ducret**

Game Developer, Software Engineer





#### **EXPERIENCE**

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

January 2021 - Present

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 received by players, with more than 200 "Very Positive" reviews.

## **AyoLab**, Paris, France — Backend Developer

September 2019 - March 2023

Scala

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 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 Java

Developed a platform for large scale multi agent deep reinforcement and imitation learning in Minecraft. Designed learning environments and ran experiments.

## **Slimevoid**, France — Co-Founder

2011 - 201

Java

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

## **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

June 201*i* 

Highest honors, 20/20 in Mathematics, Physics and Engineering

#### **PERSONAL**

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

#### **SKILLS**

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

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

Clean code and efficient collaboration.

Fluent in English and French.

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

#### **PROJECTS**

Portfolio — marc.ducret.io

Some of the projects I am the most proud of.

## **COMPETITIONS**

"Coupe de France de robotique" junior 28th/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**<sup>th</sup>/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. Chess.

E-sports, cinema and music.