

# Marc Ducret

Experienced Software Engineer, Computer Scientist and Game Developer



## EXPERIENCE

### AyoLab, Paris, France — Backend Developer

September 2019 - Today 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, under Fei Sha's supervision.

### Slimevoid, France — Co-founder

2011 - 2013 Java

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

## PROJECTS

### Portfolio — [marc.ducret.io](http://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

June 2014

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

## PERSONAL

Born in 1996.

Located in Paris, 75006.

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## SKILLS

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

Diverse technologies: **Unity**, **OpenGL**, **TCP**, **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<sup>th</sup>/61 — 2014

French national programming 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.

**E-sports** and **cinema**.