Marc Ducret

Software Engineer, Computer Scientist

EXPERIENCE

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

Simulation and optimization in container ports. Built simulation and visualisation tools to evaluate 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.

CRIL, Lens, France — *Academic Internship*
June 2017 - August 2017   Java

Research about non-monotonic reasoning in OWL ontologies. Design, proof and implementation of a tableau algorithm for preferential ALC with Ivan Varzinczak.

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 — *vengeurk.github.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, 75004.
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SKILLS

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

Diverse technologies: **Unity**, **OpenGL**, TCP, **PyTorch**, **Tensorflow**, Keras, Android.

Fluent in English and French.

Computer understanding from CPUs' circuitry to compilation and OS development.

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
28th/61 — 2014

French national programing contest "**Prologin**"
4th/81   — 2013
11th/94 — 2017

"**Ludum Dare**" Game Jam
67th/3000 — Innovation — 2017
225th/2500 — Overall — 2019

Google CodeJam
2nd round (top 4500) — 2019

INTERESTS

Game development from conceptual design to implementation.

3D Simulation and **visualization** tools. Rendering.

Deep Reinforcement Learning and artificial intelligence in general.

Competitive or **creative** video games.

ESports and cinema.