

MICHELANGELO CONSERVA

@ m.conserva@qmul.ac.uk
📍 London, United Kingdom

in michelangeloconserva
📄 MichelangeloConserva

🔗 michelangeloconserva.github.io



EDUCATION

PhD in Artificial Intelligence

Queen Mary University of London

📅 Sept 2020 - Ongoing

📍 London, UK

Supervisors

- Funded by the Intelligent Games and Game Intelligence (IGGI) CDT.
- Large pool of supervisors from two leading UK university, QMUL and York, through the IGGI programme.
- Strong focus on model based Reinforcement Learning algorithms.

MSc in Computational Statistics and Machine Learning

University College London

📅 Sept 2019 - Sept 2020

📍 London, UK

- Graduate with Distinction.
- "Submodular Kernels for Efficient Rankings", MSc Dissertation under the supervision of Prof. Marc Deisenroth and Dr. Sesh Kumar. (Conference paper submission)
- Advanced analytical and computational skills.
- Designed to be both mathematically rigorous and hands-on, the programme covers fundamental aspects of Machine Learning and Statistics.
- Chosen modules: Probabilistic and (Un)Supervised Learning, Approximate Bayesian Inference, Numerical Optimization, Kernel Methods, Natural Language Processing, Statistical Models and Reinforcement Learning.
- Teamwork skills development through intense group courseworks.

BSc in Statistics, Economics, Finance and Insurances

La Sapienza University of Rome

📅 Sept 2016 - Sept 2019

📍 Rome, Italy

- Graduate with 110 with honours/110.
- Dissertation on Enforcing cooperation through Reinforcement Learning under the supervision of Prof. Werner Güth and Prof. AnnaConte.
- Strong mathematical skills with focus on Statistics and Probability.
- Application of Statistical methodologies to Economics and Finance (including timeseries analysis and econometric analysis)
- Exposure to the financial market through practical trading strategies exercises using Quantopian).
- Statistical analysis using Python, R and Matlab.

PROJECTS

Team fight prediction

Queen Mary University of London

📅 Jan 2021

📍 London, UK

As part of my CDT training, I developed a Machine Learning pipeline (data processing, feature engineering, model training and model testing) to process more than four millions data points taken from professional Dota 2 matches to predict the team fight event in less than two weeks. The training procedure includes multithreading code to dynamically load the massive dataset and a Pytorch neural architecture.

SOFTSKILLS

Team Work

Responsibility

Work Under Pressure

Agile

Kanban

STRENGTHS

Strong motivation

Fast Learner

Mental Flexibility

Time management

PROFESSIONAL SKILLS

- Deep Learning (Pytorch, Tensorflow, Jax).
- Statistical analysis (Pandas, Sklearn, Scipy).
- Machine Learning Pipeline building.
- \LaTeX scientific writing.
- Expert user of Linux and Windows OS
- OOB (C++,C#,Java,Python).

ACHIEVEMENTS

- Secured four years PhD funding from the IGGI CDT.
- Giochi di Anacleto (Physics Olympics): first place in the school (2015), third place in the school (2014).
- Maths Olympics: first place in the school (2015).

EXTRA CURRICULAR

- Nuffield Research Placement. Mentoring a high school student coming from a disadvantaged background to help diversify people in STEM.
- Volunteering at local youth association "Giovani Tiburtini" to provide human-to-human support to homeless people.

LANGUAGES

Italian: Mother tongue

English: Advanced

Natural Language Informed Reinforcement Learning agents

University College London

📅 Jan 2019 - March 2020

📍 London, UK

In this coursework project, I have worked on improving data efficiency and generalization capabilities of Reinforcement Learning agent through the use of Natural Language.

[Github source code.](#)

DeepBriscola

La Sapienza

📅 Nov 2018 - Feb 2019

📍 Rome, Italy

I started a remote collaboration to develop a reinforcement learning-based agent to play the Italian card game of Briscola.

[Github source code.](#)

FinancePy

La Sapienza

📅 May 2018 - Nov 2018

📍 Rome, Italy

I developed an open-source scraping tool using Beautiful Soup and Pandas for financial data including support for Morning Star and Yahoo Finance. It also includes basic financial time series (non)parametric analysis.

[Github source code.](#)

Game development projects

📅 Sep 2017 - Ongoing

Starting from my BSc, I have started developing games using Unity and Unreal game engines.

My open source projects are:

- Total War: AI. This project is part of my PhD project and its objective is to develop a lightweight clone of Total War battles to enable the use of modern Artificial Intelligence algorithms in real games.

[Github source code.](#)

- DinosHur. A chart race game inspired by Mario Kart and Beh Hur. This has been developed as part of my CDT training.

[Github source code.](#)

- DinosHur. A simple City builder simulator with moving cars and grid placement of buildings.

[Github source code.](#)