Matteo Beltrame

Details

bltmtt@gmail.com

Date / Place of Birth

08/07/1998, Rome (IT)

Links

Personal Site

https://tratteo.github.io

Portfolio

https://github.com/tratteo

Skills

Problem Solving

Machine Deep Learning

Videogames Development

Software Development

Internet of Things

Quantum Information

Quantum Computation

Languages

Italian (mother tongue)

English (professional level)

Hobbies

Skiing

Fitness

Videogames Development

Martial Arts

👤 Profile

Very enthusiastic, I want to contribute to the scientific innovation.

I give my best performance when working on projects that actually bring some concrete value to society and humanity in general, specifically in fields such as sustainability and pure scientific research. I like to work in teams in order to increase the research output and to share new concepts and ideas.

Fields in which I have particular interest:

- Machine Learning
- Performance Engineering
- Videogames Development
- Parallel Systems
- Quantum Information and Quantum Computation
- Theoretical Computer Science

🎓 Education

Computer Engineering Bachelor's degree, University of Rome, "La Sapienza"

September 2017 – February 2021

Information engineering path, specific subjects:

- Mathematical analysis, complex analysis, physics
- Computer architectures
- Software development and organization
- Parallel systems
- Systems control and design
- Electronics
- Databases
- Telecommunications
- Theoretical computer science

Thesis (in progress):
Enhancing the Neuroevolution of Augmenting topologies using a Neural Network based approach

An enhancement of the NEAT algorithm (Metaheuristic Genetic Algorithm) for feed forward Neural Networks and its improvement through the dynamization of mutation and crossover rates, alongside with the use of self-adapting multiple dynamic crossover operators.

Applied Science, Ettore Majorana High School

September 2012 – July 2017
Grade: 100 / 100

Classes focusing on computer technology, mathematics, physics and applied science in general.

📜 Certifications

First Certificate, Cambridge Assessment English

January 2015 – July 2015

Trainer certificate, "Game Development with Unity", High School Ettore Majorana

April 2017

Projects

Gravitor

December 2018 – August 2019

Language: C# Unity

An indie Android game, designed and developed individually, implementing real physical laws such as gravitation and general relativity.

Enhanced NEAT (EnNEAT)

January 2020 – present

Language: C# Unity

Bachelor's Thesis project.

IoT Android App

February 2018 – present

Language: Java

Android app interface for the IoT home automation project.

IoT Home Server Hub

February 2018 – present

Language: Java

IOT multithreaded server for home automation project. Representing the central hub that redirects all the client requests to the designated devices.

IoT Raspberry Server

February 2018 – present

Language: C++

Raspberry Pi server used to handle LED and temperature sensors.

TUtils Unity Library

January 2020 – present

A Unity library developed to facilitate some Unity tasks.

Used in Gravitor and EnNEAT projects.