



Marco Maretti

CURRICULUM VITAE

PERSONAL INFORMATION

Phone	+39 347 738 3432
Email	marco.maretti@unimore.it
Date of birth	13 October 1999
Nationality	Italian
Profile	PhD student in Computer and Data Science with a background in Computer Science. Solid experience in applied research in physics simulation, machine learning and computer graphics. Advanced programming and AI framework skills.

EDUCATION AND TRAINING

Programme	PhD Programme in Computer and Data Science for Technological and Social Innovation
Institution	University of Modena and Reggio Emilia
Duration	1 November 2025 – present
Programme	Master's Degree in Computer Science, LM-18 (M. D. 270/04)
Institution	University of Modena and Reggio Emilia
Duration	1 December 2021 – 18 July 2024
Date awarded	18 July 2024
Final grade	110/110
Thesis	Research, Development and Analysis of Algorithms for the Generation of Interactive Anamorphic Projections on Mobile Systems
Programme	Bachelor's Degree in Computer Science (M. D. 270/04), class L-31 – Computer Science and Technologies
Institution	University of Modena and Reggio Emilia
Duration	1 September 2018 – 27 October 2021
Date awarded	27 October 2021
Final grade	106/110
Thesis	Design, Development and Analysis of an Android Application Using the Cross-Platform Technologies Xamarin and Flutter

RESEARCH EXPERIENCE

25 Sep 2024 – 25 Sep 2025	Research Fellow (assegno di ricerca) University of Modena and Reggio Emilia “SpaceTensegrity” – research project in collaboration with ASI (the Italian Space Agency) on the feasibility of applying tensegrity principles in the space sector. Personally responsible for the physics simulation and for applying
---------------------------	--

reinforcement learning techniques to control the dynamic parts of tensegrity structures.

- “3D Real-time Simulation of Industrial Sheet-metal Bending Process” – in collaboration with Esautomotion S.p.A.: research and development of efficient solutions for the 3D simulation of industrial bending processes.

WORK EXPERIENCE

1 Oct 2023 – 21 Dec 2023

In-house University Internship

University of Modena and Reggio Emilia – Supervisor: Prof. Nicola Capodieci

- R&D on 3D visualisation and rendering projects in innovative application areas.

1 May 2021 – 31 Jul 2021

In-house University Internship

University of Modena and Reggio Emilia – Supervisor: Prof. Riccardo Martoglia

- Design and development of a mobile app in C# (Xamarin).
- Design and development of a mobile app in Flutter.
- Comparison, analysis and benchmarking of the two mobile applications.

1 May 2017 – 1 Sep 2017

School-to-Work Placement [C++ Software Developer]

Elco Elettronica s.n.c. – Correggio (Reggio Emilia)

- Development of software for PLC design in C++.

PERSONAL SKILLS

Mother tongue

Italian

Other languages

Language	Listening	Reading	Spoken interaction	Spoken production	Writing
English	B2	B2	B2	B2	B2

During the bachelor's programme, passed the optional Advanced English examination (L-LIN/12), certifying level B2 of the CEFR framework.

Communication skills

- Good communication and presentation skills, developed during my studies and my time as a research fellow.

Organisational and managerial skills

- Good organisational and scheduling skills in research project settings, developed during my time as a research fellow.

Digital skills – self-assessment grid

Area	Level
Word processing, spreadsheets, presentation software	Advanced
Programming languages	Advanced (C/C++, Python, Java)
Image editing	Independent
Statistical software	Basic (MATLAB)

Levels: Basic – Independent – Advanced

Other IT skills

- Advanced knowledge of computer graphics and 3D rendering frameworks: OpenGL API, Vulkan API, Godot Game Engine.
- Advanced knowledge of mobile development frameworks: Android Studio, Flutter and Xamarin.
- Advanced knowledge of machine learning frameworks (PyTorch, TensorFlow).
- Advanced knowledge of the CUDA framework and the MuJoCo physics simulation engine.

The information given in this curriculum vitae is true and accurate pursuant to Articles 46 and 47 of Italian Presidential Decree (D.P.R.) 445/2000.