



# MARCO COLUSSI

## CURRICULUM VITAE



Date of birth / 19/01/1996 Age / 27  
Place of birth / VITTORIO VENETO (TV)  
Nationality/ citizenship / Italy  
Via Comune Antico, 62, 20125 MILANO (MI)  
Driving licence / B / Car available  
ID/4181957 updated on 28/03/23

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### FOREIGN LANGUAGE SKILLS

MOTHER TONGUE(S): Italian



ENGLISH GOOD C1 C1 B2 B2 B2

### DIGITAL COMPETENCES

**Self-assessment grid**   
Information processing **Proficient user**  
Communication **Independent user**  
Content creation **Independent user**  
Safety **Basic user**  
Problem solving **Independent user**

### EXPECTATIONS AND FEATURES OF THE DESIRED JOB

INTENTION TO CONTINUE STUDIES: **Yes** / Doctoral studies  
ECONOMIC SECTOR: **1.** computer science, data processing and acquisition  
CAREER FIELD: **1.** R&D and patents / **2.** Engineering and design  
PREFERRED DISTRICT TO WORK IN: **1.** MILANO  
AVAILABILITY FOR BUSINESS TRAVELS: **Yes, but not often**  
AVAILABILITY TO RELOCATE ABROAD: **Yes, even in non-European countries**

### Career Goal

As a Ph.D. student in Computer Science with a strong focus on Machine Learning, I am seeking opportunities to further develop my expertise in this field and make meaningful contributions to the advancement of AI. My objective is to collaborate with experts, work on challenging problems, and contribute to the development of innovative solutions that have a positive impact on society addressing real-world challenges and driving progress in areas such as medical imaging.



### WORK EXPERIENCES

#### RESEARCHER WITH SCHOLARSHIP FONDAZIONE LUIGI VILLA (POLICLINIC OF MILAN)

Computer science, data processing and acquisition  
MI (MI)  
02/2021 - 10/2021

**Main activities and responsibilities:** Research and development of an automatic diagnostic software of pathology using ultrasound images. During the period of work, I dealt with defining a protocol to collect and anonymize the data, pre-process, and analyze it.

Subsequently, I dealt with the development of a machine learning system to classify images as pathological or physiological, limited by the small size of the dataset, I implemented generative data augmentation and transfer learning techniques. I have often produced presentations and documents to discuss the results with my superiors.

**Acquired skills and achieved objectives:** Machine learning, collaboration with professionals outside the IT world, management of deadlines, presentation of results in a clear way, and drafting of scientific reports describing the work performed. Employed as: intern/trainee - fixed-length contract | Company sector: R&D and patents

#### Undergraduate Internship UNIVERSITÀ DEGLI STUDI DI MILANO

Education, training, research and development  
MILANO (MI)  
07/2018 - 10/2019

**Main activities and responsibilities:** Development of an exergame for children with hyperplasia who need to undergo a hand rehabilitation process. The system bases the generation of graphic and sound ambience on the player's emotions recognized by an ml algorithm performing emotion recognition from the face. This is with the aim of adapting the game to the patient's current emotional state, reducing fatigue, and increasing interest. Employed as: intern/trainee - undergraduate internship | Company sector: Engineering and design

### other information

Currently employed: No



### ACADEMIC STUDIES

PH.D.  
2021 - 2024  
ONGOING STUDIES



Università degli Studi di MILANO  
Faculty: Scienze e Tecnologie  
Computer science  
Expected graduation date: 2024

MASTER'S DEGREE

Università degli Studi di MILANO

2019 - 2021  
CERTIFIED TITLE



Facoltà di Scienze e Tecnologie

Informatica

LM-18 - 2nd level degree in Computer Science

Dissertation/thesis title: Automatic joint-effusion detection with deep-learning for low data regime | Thesis supervisor: MASCETTI SERGIO

Age at graduation: 25 | Official duration: 2 years

Final degree mark: **110/110 cum laude**

Graduation date: 15/10/2021

BACHELOR'S DEGREE

2015 - 2019

CERTIFIED TITLE



Università degli Studi di MILANO

Facoltà di Scienze e Tecnologie

Informatica

L-31 - 1st level degree in Computer Science

Dissertation/thesis title: MOOD PROCEDURAL EXERGAME: SOUNDSCAPE GENERATION | Thesis supervisor: BORGHESE NUNZIO ALBERTO

Age at graduation: 23 | Official duration: 3 years

Final degree mark: **96/110**

Graduation date: 17/10/2019

SCIENTIFIC CERTIFICATE

VITTORIO VENETO

2015

Liceo 'Marcantonio Flaminio', VITTORIO VENETO (TV)

School-leaving examination mark: **73/100**

Kind of secondary school diploma: **Italian secondary school diploma**

Kind of secondary school attended: **Public school**



## FOREIGN LANGUAGE SKILLS

### DIPLOMAS AND CERTIFICATES

**English** TOEIC Listening and Reading, EAS-milan.

Listening: 490

Reading: 480, 03 Sep 2019, **Europass level C1**

**English** TOEIC speaking & Writing Test, EAS-milan.

Speaking: 180

Writing: 170, 08 Sep 2021, **Europass level C1**



## INFORMATION TECHNOLOGY SKILLS

### COMPUTER PROGRAMMING

**Integrated development environments (IDE):** IntelliJ IDEA

(Intermediate), Visual Studio Code (Advanced) | **Markup**

**languages:** LaTeX (Advanced) | **Programming languages:** Bash

(Intermediate), C# (Foundation), Git (Advanced), Java (Advanced)

, Python (Advanced)

### SYSTEMS AND NETWORKS MANAGEMENT

**Embedded systems:** Arduino (Intermediate) | **IoT:** Internet of Things

(Intermediate), Sistemi distribuiti (Intermediate) | **Operating**

**systems:** Linux (Advanced), MacOS (Highly Specialised), Microsoft

Windows (Intermediate)

### DATA MANAGEMENT

**Big Data:** Elaborazione immagini (Advanced), Machine learning

(Highly Specialised)



## CONFERENCES AND SEMINARS

### CONFERENCES

30/11/2022

**HC@AixIA**, Associazione Italiana per l'Intelligenza Artificiale, Udine

Character: Author

[sites.google.com/unical.it/hcaixia2022/program-an...](https://sites.google.com/unical.it/hcaixia2022/program-an...)



## PUBLICATIONS

### JOURNAL ARTICLES

Marco Colussi, Gabriele Civitarese, Dragan Ahmetovic, Claudio

2023

**Bettini,**

**Roberta Gualtierotti, Flora Peyvandi, Sergio Mascetti,** Ultrasound detection of subquadricipital recess distension  
Review: Intelligent Systems with Applications  
Publisher: Elsevier  
[doi.org/10.1016/j.iswa.2023.200183](https://doi.org/10.1016/j.iswa.2023.200183)

**ABSTRACT/REPLY/COMMENTS**

2022

**Roberta Gualtierotti,**

**Sara Arcudi,**

**Alessandro Ciavarella,**

**Marco Colussi,**

**Sergio Mascetti,**

**Claudio Bettini,**

**Flora Peyvandi,** A Computer-Aided Diagnosis Tool for the Detection of Hemarthrosis By Remote Joint Ultrasound in Patients with Hemophilia  
Review: Disorders of Coagulation or Fibrinolysis: Clinical and Epidemiological  
Publisher: Blood  
[doi.org/10.1182/blood-2022-163690](https://doi.org/10.1182/blood-2022-163690)