

## **Bernardo Petracchi**

bernardopetracchi@gmail.com

Skype: bernardopetracchi

### **Academic Education**

#### Dottorato di Ricerca (PhD)

Bioengineering, Bioinformatics, and Health Technologies, University of Pavia 2025 (expected)

#### Laurea Magistrale (MS)

Electronic Engineering, University of Florence 2021

#### Laurea (BS)

Electronic and Telecommunications Engineering, University of Florence 2018

### **Other Education**

Arduino Unchained 2025

Programmazione ad Oggetti e Ingegneria del Software (course with exam),  
University of Pavia 2024

Laboratorio di FPGA (course with exam), University of Pavia 2023

Coaching ForDoc (course), University of Pavia 2023

High Performance Computing Summer School, University of Pavia 2023

Cyber Physical Systems Summer School, Pula (Sardinia) 2022

Staphyloxanthin-Targeting Phototherapy Platform to Combat  
Methicillin-Resistant S. Aureus Infection (seminar), University of Pavia 2022

The Data Driven Approach & Data Intensive Applications: The Data  
Platform's Paradigm and its Layers (seminar), University of Pavia 2022

Machine Learning Specialization (course), Coursera 2022

Python 3.10 Guida Completa: da Principiante a Esperto (course), Udemy 2022

Machine Learning (course with exam), University of Pavia 2022

Deep Learning (course), MATLAB 2022

Machine Learning (course), MATLAB 2022

Introduction to Simulation and Debug of FPGAs (course), Intel 2021

Introduction to FPGAs and the Intel Quartus Prime Software (course), Intel 2021

Second-Level Sommelier Certificate, FISAR, Prato 2019

First-Level Sommelier Certificate, FISAR, Prato 2018

### **Scholarships**

Erasmus Scholarship, RWTH Aachen University 2018

### **Work Experience**

Engineer (natural language processing models for textual data extraction and  
management), VesendaS.r.l., Pavia 2024

Engineer (ultrasound systems for railway monitoring), Comesa S.r.l., Prato 2021

High-School Tutor (mathematics, physics, computer science, and electronics) 2016-2021

Grape Harvester, Piandaccoli Farm, Florence 2016

### **Academic Publications**

“Petracchi, B.; Torti, E.; Marenzi, E.; Leporati, F. Acceleration of Hyperspectral Skin Cancer Image Classification through Parallel Machine-Learning Methods, *Sensors*, 2024.”

“Petracchi, B.; Gazzoni, M.; Torti, E.; Marenzi, E.; Leporati, F. Machine Learning-Based Classification of Skin Cancer Hyperspectral Images. In *Proceedings of the 27th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems*; Athens, September 2023; pp. 1–11.”

### **Skills and Competencies**

- English (fluent), Italian (native)
- MATLAB, Simulink, Intel Quartus Prime, VHDL, Vivado Design Suite, C, Cuda C, Open MP, Visual Studio, Python, Pytorch, Anaconda, LabVIEW, Java, Arduino
- Communication Skills
- Attention to Detail
- Flexible and Adaptive
- Time-Management Skills and Punctuality
- Teamwork Skills

### **Hobbies and Interests**

In my spare time, I enjoy playing soccer, cycling, reading, wine tasting, and cooking

Prato, April 2025

SIGNATURE  
Bernardo Petracchi