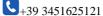
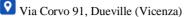


# Amedeo Carraro

Italian citizen, available to relocate











Computer Engineer specialized in Artificial Intelligence and Machine Learning, with experience in designing, optimizing, and deploying end-to-end neural network pipelines and Large Language Models (LLMs), as well as automatic classification systems. Skilled in integrating AI solutions into production environments, with a focus on performance, scalability, and inference time reduction. Excellent ability to work in interdisciplinary teams and manage complex technical projects while meeting strict functional and time objectives.

### **Professional Experience**

#### Full Stack Developer Intern, ITReview, Padua, Italy

Oct 2023 - Dec 2023

- Assisted in developing full-stack web features using React for the frontend and Node.js with MongoDB and SQL on the backend;
   created reusable components and integrated RESTful APIs to deliver scalable user interfaces
- Collaborated in code reviews to elevate code readability and maintainability, implementing best practices and optimizations that reduced database response times by approximately 20%

## Software programmer Intern, AppLibra s.r.l, Thiene, Italy

Sep 2021 - Dec 2021

- Managed the ERP transition from Navision to Dynamics 365, including hands-on development in both environments to deliver tailored software solutions that improved data consistency and process automation
- Architected and implemented Docker-based deployment systems, streamlining delivery pipelines to accelerate software distribution by 50% and significantly reducing infrastructure downtime through containerized service management

#### Data Analyst Intern, ULSS 7 Pedemontana, Thiene, Italy

Jun 2015 - Aug 2015

- Led the deployment of a digital signature system across the regional healthcare network, enabling real-time data capture and analysis, ensuring compliance with healthcare data governance and enhanced document security
- Designed and executed automation workflows that eliminated manual errors, accelerated processing times by 3–4×, and delivered instantly accessible, shareable data across the network, boosting overall efficiency

#### **Education**

MSc in Computer Engineering: Artificial Intelligence and Robotics (93/110) University of Padua, Italy

Sep 2022 – Mar 2025

Relevant Modules: Machine Learning, Artificial Intelligence, Computer Vision, Intelligent Robotics

### Research Thesis: Neural Network for Classifying Variable Star Light Curves

Oct 2024 – Mar 2025

- Analyzed and implemented of two hybrid architectures combining CNNs and LSTMs for variable star classification, based on indepth review and integration of techniques from multiple state-of-the-art publications
- Achieved consistently over 95 % F1-score across all experiments, with peak over 99%, using ΔmΔt image encoding and reconstructed light curves from the ZTF dataset, while assessing trade-offs between accuracy and computational efficiency

#### **Erasmus+ Computer Science: Artificial Intelligence University of Cyprus**

Jan 2024 – Jun 2024

Relevant Modules: Natural Language Processing, Entrepreneur AI, AI in medicine

Ba in Computer Engineering (85/110) University of Padua, Italy

Sep 2016 – Mar 2022

Relevant Modules: Software Engineering, Databases, Operating Systems, Data Structures & Algorithms

### Additional Experience/ Projects

#### **Erasmus Hardgainer**

Jan 2024 - Jun 2024

Fine-tuned Mistral-7B Transformer LLM with Hugging Face & LoRA, including consistent tokenizer initialization and data
preprocessing, executing structured prompt engineering workflows to develop a lightweight generative QA system optimized for
memory-constrained environments, with evaluation metrics BLEU 62%, ROUGE-1 81%, METEOR 78%

Project Leukemia Jan 2024 – Jun 2024

• Designed a robust leukemic cell classification neural network using OpenCV (cv2), combining data augmentation with handcrafted feature extraction; optimized hyperparameters via GridSearch, reaching an F1-score of 84.66%

### **Technical Skills and Languages**

- Program Language: Python, Java, C, C++, C#, JavaScript, SQL, HTML, PHP, C/BASE, C/AL, MATLAB, ROS, R
- IT knowledge: Tensorflow, Numpy, Pandas, Scipy, Matplotlib, Keras, Torch, scikit-learn, Apache Spark, Github & MLOps
- Languages: Italian (mother tongue), English (C1) and French (A2)

I authorize the processing of my personal data in accordance with current data protection regulations