# Carlo Rosso





#### **Software Skills**

#### Machine Learning:

Torch, Scikit-learn, NLP, AlphaFold, NumPy, HuggingFace, Pandas Polars, Weights & Biases, NLTK

Languages: Python, Rust, Bash, Haskell, C/ C++, Java, TypeScript, JavaScript, Golang, SQL, Lua, Matlab, PHP, HTML, CSS, LaTex, Typst

#### Programming:

Functional Programming, Algorithms, Git, UV, NeoVim, tmux, DataSpell, undotree, Jupyter, Alacritty, Drizzle, Angular, Docker, Node.js, Nest.js, Django, Tailwind

#### Languages

Italian: Native English: IELTS 7.5

## Interests

Sports: Judo, Sailing,

Skiing

**Hobbies**: Open Source, Reading, 3D Modeling, Journaling, Technology

#### About me \_

Hi! I'm Carlo, a versatile technologist with expertise in AI/ML, full-stack development, and high-performance computing. I deliver robust, effective and efficient solutions across domains—from NLP to structural biology.

#### Professional Experience \_\_\_



# Machine Learning Intern link

UNIVERSITY OF PADUA

Padua (PD), Italy

Jun 2024 - Aug 2024

- Performed sentiment analysis to examine whether syntax conveys meaning.
- Achieved **55.2%** accuracy using tree-kernel methods with syntactic data.
- Improved accuracy to 57.3% with LLMs (RoBERTa) w/o syntactic information.

#### Education \_\_



# Master of Science in Computer Science

University of Copenhagen

Copenhagen, Denmark

Sep 2024 - ongoing

• Focusing in Machine Learning, and Integrative Structural Biology



# **Bachelor of Science in Computer Science**

Padua, Italy

UNIVERSITY OF PADUA

Oct 2021 - Sep 2024

- Artificial Intelligence, Software Engineering, Operating Systems.
- Final Grade: 106/110.



# **Exchange Student**

RØDKILDE GYMNASIUM

Vejle, Denmark

Aug 2019 - May 2020

#### Projects \_\_\_

#### Weav link

- Social media to discover and advertise events, pubs, and coffees.
- Engineered a scalable python backend with **Django** in **Docker**.

# Easy Meal link

- Web application to streamline restaurants' reservations and orders.
- Implemented in Node.js with Nest.js and Drizzle and separately in Angular.
- Full-stack application with >90% coverage of unit test and integration test.
- Processes' documentation: primary, supplementary and organizational.
- Evaluation: 25/30 in Software Engineering.

# Music vs Robot link

- Developed tower-defense-style game inspired by *Plants vs Zombies*.
- Implemented in C++14 with Qt framework, automated with Makefile.
- Evaluation: 3/3 with honors in Object-Oriented Programming.

# LogBook link

- Parsing Markdown into HTML in Rust and publishing with GitHub Actions.
- Open source project for personal notes, project management, and journaling.
- Keeping a daily LogBook, improves effectiveness and efficiency.

# Other Professional Experiences \_\_\_\_



# **Front Office Assistant**

UNIVERSITY OF PADUA

Padua, Italy

Aug 2023 - Nov 2023

- Data processing support, front office tasks, and archiving.
- 200h collaboration with Students' Career Office.
- Selected by merit for a part-time student collaboration.



# Mechanical Worker

Padua, Italy

TPA SRI

Jun 2019 - Jul 2019

• Fabricated and assembled automated machines, by cutting, shaping and preparing metal parts according to project specifications.

#### Extra Activities \_



#### Volunteer Handyman

Hedensted, Denmark

**ØHK HEDENSTED** 

Sep 2019 and Sep 2025

- Cleaning the facility: picking up cups, washing the floor and the tables.
- Sorting out tables and benches, and assisting the people at the festival.



## Volunteer Youth Worker at Summer Camp

Pordenone, Italy

A. S. SKORPION CLUB PORDENONE

Jun 2020 - Aug 2020

- Cleaning the facility: washing the floor and the tables.
- Sorting out tables and benches, and assisting the people at the camp.
- Organizing activities: capture the flag, volleyball, and making bracelets.
- Looking after kids: serving food, playing with them, and tutoring them.
- Also in 2018 and 2017.

# Sport \_\_\_\_\_



#### Judoka

Pordenone, Italy

Sep 2006 - Aug 2021

• Qualified to FIJLKAM national competition.

A. S. SKORPION CLUB PORDENONE

- Copetitions many weekends all around Italy, from Trentino to Sicily.
- Stage in Winter and Easter, with over 300 people of the same age every year.
- 3 times a week technical training and 2 times a week strength training.



# **Summer Sailing Course Winner** SCUOLA NAVALE MILITARE "F. MOROSINI"

Venice, Italy

Jul 2018

- Winner for the course, on 15 available places for Italian boys.
- 20h theoretical classes for sailing.
- 36h practical classes on the sea in front of Venice.

#### Hobbies \_

# Cycling

• I like to commute by bike every day for the environment, to exercise and to look at the city.

#### **Journaling**

- I enjoy writing down my daily life, my thoughts and my ideas.
- I want to keep trace of the path I am building, to reflect upon in the future.
- It helps me pointing out my goals, who I am, and where I want to go.

#### **Open Source for Europe link**

• Building an platform for European Companies to sposor single issues together.

August 2025 CARLO ROSSO · RESUME 2