

# Lorenzo Pegorari

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## Education

### Polytechnic University of Milan

PURSUING A BACHELOR'S DEGREE OF SCIENCE IN COMPUTER SCIENCE AND ENGINEERING

Cremona, Italy

Sep. 2021 - present

### Scientific High School "Gaspere Aselli"

HIGH SCHOOL DIPLOMA IN SCIENTIFIC STUDIES, GRADUATED WITH 3.25/4.0 GPA

Cremona, Italy

Sep. 2016 - Jun. 2021

## Experience

### Google Summer of Code 2025

GSoC'25 CONTRIBUTOR FOR THE OPEN SOURCE ORGANIZATION BRL-CAD

United States, Online

May 2025 - Sep. 2025

- Chosen among 1,280 accepted contributors against 15,240 participants (~8.4% acceptance rate).
- Enhanced the lightweight, object-oriented, C++ API MOOSE, enabling applications to easily interface with the Geometry Editing Library (libged).
- Developed a console widget for Arbalest, BRL-CAD's prototype Qt GUI, giving users access to libged's commands.
- Engineered a new tree-based representation for geometry file objects, cutting file-opening time by an average of 66% (with peak optimizations over 97%) and significantly improving code clarity and maintainability.
- Technologies used: C, C++, Qt6.

## Side Projects

### OPEN SOURCE

#### BRL-CAD

OPEN SOURCE DEVELOPER

Online

Mar. 2025 - present

- Selected as a GSoC'25 Contributor.
- Contributed to BRL-CAD's prototype Qt-based GUI Arbalest and lightweight, modular, object-oriented C++ API MOOSE.
- Technologies used: C, C++, Qt6.

### PERSONAL PROJECTS

#### Simply Colorful - Theme for the note-taking application Obsidian

CREATOR | MAIN DEVELOPER | MAIN DESIGNER

Online

Oct. 2024 - present

- This theme has gathered over 8500 downloads (as of January 16th, 2026).
- Technologies used: SASS, CSS, Grunt (JavaScript task runner).

## Skills

Front-end	JavaScript, SASS, CSS3, HTML5
Software engineering	C, C++, Qt6, Python3, Shell
Other	RISC-V, MIPS, LaTeX
Software	Git, GitHub, Google Sheets, Microsoft Excel, Microsoft Word, Microsoft Powerpoint
Languages	Italian (Native), English (C1 Proficiency)

## Certificates

2020	<u>Cambridge English B2 First</u> , Overall Cambridge English Scale score: 180 (CEFR Level C1)	ID: B2962291
2019	<u>Cambridge English B1 Preliminary</u> , Overall Cambridge English Scale score: 163 (CEFR Level B2)	ID: 196IT0600133

## Competitions

2023	<u>ITACPC 2023</u> , participated as a team of 3 people and placed 49th out of 218 teams	Online
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## Extracurricular Courses

## Worlds generated by code: The Generative AI

Polytechnic University of Milan

8 HOURS COURSE HELD BY ANDREA BELLÌ, ENTERPRISE ACCOUNT EXECUTIVE AT LINKEDIN

Nov. 24th, 2023

- Learned the basics of how Large Language Models operate.
- Learned the basics of Prompt Engineering to quickly and clearly obtain outputs from an LLM.
- Discussed the ethics, the opportunities and the risks of using LLMs.

## Boolean Data Week

Online

8 HOURS WORKSHOP HELD BY BOOLEAN

Nov. 20th-24th, 2023

- Learned the basics of Data Analysis with Python and Tableau.
- Modified, cleaned and visualized an example dataset of 930k movies to find insights into cinematography.

## LinkedIn to look for a job

Polytechnic University of Milan

2 HOURS SEMINARY HELD BY ANDREA BELLÌ, ENTERPRISE ACCOUNT EXECUTIVE AT LINKEDIN

Nov. 17th, 2023

- Learned to create the perfect LinkedIn profile as a support for finding the desired job.

## Boolean Coding Week

Online

8 HOURS WORKSHOP HELD BY BOOLEAN

Oct. 16th-20th, 2023

- Learned the basics of HTML, CSS and JavaScript for front-end web developing.
- Developed three web game examples (Minesweeper, Stacker and Frogger).

## Rapid Prototyping: Open Data e Machine Learning (GitHub Repo)

Polytechnic University of Milan

4 HOURS WORKSHOP HELD BY JACOPO DE STEFANI, PH.D IN TIME SERIES ANALYSIS AND FORECASTING THROUGH MACHINE LEARNING

Dec. 16th, 2022

- Modified, cleaned and visualized an example dataset of 5110 people's personal and medical information using Python, Jupyter Notebook, pandas and seaborn.
- Prototyped a ML model capable of predicting an individual's chance of having a stroke using scikit-learn.

## Artificial Intelligence: Instructions for use

Polytechnic University of Milan

2 HOURS SEMINARY HELD BY JACOPO DE STEFANI, PH.D IN TIME SERIES ANALYSIS AND FORECASTING THROUGH MACHINE LEARNING

Dec. 13th, 2022

- Learned the basics of AI (different dataset requirements, instance-based and model-based learning, data management, etc.).
- Learned the basic inner workings of ML (linear regression, decision trees, Artificial Neural Networks, etc.).
- Discussed the ethics of ML.

## Kotlin and Jetpack: For modern and efficient Android apps

Polytechnic University of Milan

8 HOURS COURSE HELD BY LUCIANO BARESI, PROFESSOR AT POLYTECHNIC UNIVERSITY OF MILAN

Nov. 22nd & 25th, 2022

- Learned the basics of Kotlin and Jetpack Android, the structure of a typical Android app and how to use the official IDE Android Studio.
- Created a simple application.

## Beyond The Subject: Conceptual changes induced by artificial intelligence and other natural or artificial sciences

Polytechnic University of Milan

2 HOURS SEMINARY HELD BY GIANLUCA MAGNANI, BA OF PHILOSOPHY AT UNIVERSITY OF MILAN

Feb. 19th, 2021

- Discussed the philosophical mutations in the meaning of the word "subject", and many correlated terms such as "rationality" and "free will", caused by the persuasive impact of AI on our means of understanding.