

MATTIA PIAZZALUNGA

NLP-AI, Computer Science Ph.D. student

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Find me. UniMiB, LinkedIn, GitHub, Google Scholar, ResearchGate, Hugging Face

Born in 2000, I am a Computer Science Ph.D. student in NLP-AI, with two honours degrees in Computer Science and Engineering from University of Milano-Bicocca. My research focuses on Artificial Intelligence, with a specific emphasis on Natural Language Processing. The main objective is to improve existing language models by enhancing their generalization capability and developing new efficient deep learning techniques. I am currently working at the IKR3 Lab in the DISCo department of the University of Milano-Bicocca. A quote I like to mention goes like this: "Passion makes the difference between a job and a career." I believe it's precisely the passion for Computer Science, and, in general, for everything related to innovation and research, that has motivated me over the years to challenge myself in pursuit of my goals.

EDUCATION

Ph.D. Computer Science, NLP-AI ★

November 2024 - now

University of Milano-Bicocca

Milan, IT

The main theme of the program is "Artificial Intelligence for the improvement of social and individual well-being". The research focuses on Artificial Intelligence, with a specific emphasis on Natural Language Processing. The main objective is to enhance existing language models by improving their generalization capability and developing new efficient deep learning techniques. The Ph.D., under the supervision of Professor Gabriella Pasi, is part of the DISCo Department's program, which is highly selective with an acceptance rate of about 10%.

M.S. Computer Science ★

October 2022 - October 2024

University of Milano-Bicocca

Milan, IT

Master's degree in Computer Science obtained with a final grade of **110 cum laude**/110. The academic program particularly focused on topics such as Artificial Intelligence, with a special emphasis on Deep Learning, Software Engineering, Theoretical Computer Science, Cloud Computing and Mathematical Analysis. The Master's thesis, supervised by Professor Gabriella Pasi, involved a challenging research project in the field of Natural Language Processing and was titled "Bridging a GAP: Text Style Transfer from Journalistic to Conversational for Enhanced Social Media Dissemination of News".

B.S. Computer Science ★

November 2019 - July 2022

University of Milano-Bicocca

Milan, IT - [link](#)

Bachelor's degree in Computer Science obtained with a final grade of **110 cum laude**/110. The academic program particularly focused on topics such as Algorithmics, Advanced Programming, Data Analysis, Software Engineering, Mathematical Analysis, Linear Algebra, and Systems & Network management. The Bachelor's thesis, supervised by Professor Francesca Arcelli Fontana, focused on Software Design and was titled "Evolution of an Enterprise Application".

H.S. Computer Science

September 2014 - July 2019

I.T.I. G. Marconi

Bergamo, IT

High School diploma in Computer Science. The school program particularly focused on topics such as Basic programming, Object-oriented programming, Mathematics, Web design, Network architectures, Network administration, Multi-threaded programming and Cybersecurity. The high school, with a program strongly focused on innovation, won the prestigious "Top 10 World's Best School Prize for Innovation" awarded by T4 Education in 2024.

WORK EXPERIENCE

Ph.D. Researcher, NLP-AI ★

University of Milano-Bicocca, IKR3 Lab

November 2024 - now

Milano, IT

The research focuses on Artificial Intelligence, with a specific emphasis on Natural Language Processing. The main objective is to enhance existing language models by improving their generalization capability and developing new efficient deep learning techniques.

M.S. Student Researcher, NLP-AI ★

University of Milano-Bicocca, IKR3 Lab

May 2024 - October 2024

Milano, IT

The research focused on the area of Natural Language Processing and Text Style Transfer, leading to the development of the master's thesis. The latter, supervised by Professor Gabriella Pasi, involved a challenging research project in the field of Natural Language Processing and was titled "Bridging a GAP: Text Style Transfer from Journalistic to Conversational for Enhanced Social Media Dissemination of News".

Intern, Software Engineering ★

PwC, Digital Innovation Team

March 2022 - June 2022

Milano, IT

Internship aimed at the design, management, evolution and development of an enterprise application (EIM) for intelligent electronic invoicing in Italy by multinational companies. Customer support activities were carried out. The internship led to the conception of the Bachelor's thesis, supervised by Professor Francesca Arcelli Fontana. The latter focused on Software Design and was titled "Evolution of an Enterprise Application".

Intern, Full-Stack developer

YourBiz

July 2018 - July 2018

Bergamo, IT

Internship aimed at front-end and back-end development of landing-pages.

Intern, Various Roles

Different companies

5 months between 2017 - 2018

Bergamo, IT

Several internships were held in collaboration with different entities such as ATS Corporation, AIDO, and YourBiz. The activities performed were varied: from full-stack development, to systems administration, to creating systems for querying the EOS blockchain.

PROFESSIONAL AFFILIATIONS

GDG Member

Google Developers Group, GDC Milano

July 2025 - now

Milano, IT

Google Developer Groups are communities dedicated to sharing and spreading Google technologies. Promoted and supported by Google, GDGs bring together developers, IT professionals, and digital innovators through events that offer strong opportunities for learning and networking. Each group is led by industry experts and organizes workshops, conferences, and technical meetups on cutting-edge topics such as artificial intelligence, mobile development, cloud computing, and much more.

Member, top 15% students worldwide ★

Golden Key International Honour Society

February 2025 - now

Worldwide - [link](#)

The Golden Key International Honour Society is the largest collegiate honor society in the world, recognizing academic excellence among undergraduate and graduate students. Membership is by invitation and is reserved for the top 15% of students.

Alumno

BicoccAlumni

November 2024 - now

Milano, IT

BicoccAlumni is the alumni association of the University of Milano-Bicocca.

Mentee ★

Mentors4u

June 2024 - now

Italy - [link](#)

Mentors4u aims to promote the exchange of ideas and content useful for personal and professional growth. A merit-based community for outstanding students, with the goal of supporting the growth of the country.

Global Shaper ★

World Economic Forum, Global Shapers Community

November 2024 - April 2025

Milano, IT - [link](#)

Global Shapers is a program by the World Economic Forum that brings together young leaders eager to make a positive impact in their communities. Through a global network of local hubs, participants develop economic, social, and environmental projects, collaborating with people from diverse cultures and perspectives.

PUBLICATIONS, ARTICLES AND THESES

Master's Thesis - Bridging a GAP: Text Style Transfer from Journalistic to Conversational for enhanced social media dissemination of news ★

January 2024 - October 2024

Mattia Piazzalunga & Gabriella Pasi

The Master's thesis, supervised by Professor Gabriella Pasi, explores a novel approach to making news more accessible on social media through Text Style Transfer, converting journalistic language into a conversational tone. Developed in collaboration with the IKR3 Lab at the University of Milano-Bicocca and ANSA.it, the project introduces the J2C-TST task, designs multilingual datasets and models, and investigates techniques to automate and optimize the transformation of news content for digital dissemination.

Bachelor's thesis - Evolution of an Enterprise Application

March 2022 - July 2022

Mattia Piazzalunga & Francesca Arcelli Fontana

[link](#)

The Bachelor's thesis, supervised by Professor Francesca Arcelli Fontana, explores software design within the context of enterprise applications. Developed in collaboration with PwC's Digital Innovation team and the ESSeRE Lab at the University of Milano-Bicocca, the work combines theoretical foundations with hands-on experience gained during an internship, addressing the challenges of designing, maintaining, and evolving large-scale software systems in corporate environments.

MAIN PROJECTS

Main projects on GitHub ★

October 2020 - now

Mattia Piazzalunga, GitHub

[link](#)

In addition to those listed in this section, all my main projects (15+), both professional and personal, from October 2020 to the present are available on GitHub.

Pysteer ★

March 2025 - Now

Mattia Piazzalunga

[link](#)

Pysteer is an open-source Python library designed to efficiently and precisely modify the behavior of pre-trained language models (LLMs) during inference, without the need to retrain them, alter their weights, or use fine-tuning techniques. This modification is achieved through activation steering, a technique that intervenes in the model's intermediate activations to guide the output toward desired properties and, by extension, steer the model's behavior toward a target one. The library is compatible with various open-source models and is developed to make model steering simple and accessible.

Core competencies: AI/ML, NLP, Software Engineering, Software Architecture, OOP, Algorithms, Data Structure, ...

Specific competencies: Python (Pytorch, Transformers, ...), Git, ...

Sales Support Assistant

November 2024 - April 2025

Mattia Piazzalunga & Riccardo Andena

Design and development (including backend, security, and authentication) of a multi-user management application for identifying the best loan rates offered by a pool of Italian banks, based on dozens of customer characteristics. The architectural foundations were laid and an initial part of the frontend was implemented. The application enables multiple collaborators to work simultaneously on the analysis and selection of rates, maintaining a complete history of proposals and matches customer-rate-loan-bank.

Core competencies: *Project Managament, Software Engineering, Software Architecture, Full-Stack Development, OOP, REST API, Data Structure, ...*

Specific competencies: *Java (Spring, Spring Security, Spring Data, ...), SQL (PostgreSQL), HTML5, CSS3, Javascript, Bootstrap, Thymeleaf, Docker, Git, ...*

J2C-TST models ★

January 2024 - October 2024

Mattia Piazzalunga

The master's thesis focuses on the task of Journalistic to Conversational Text Style Transfer (J2C-TST), which is defined and introduced as a new variant of Text Style Transfer. This task is designed to automatically transform journalistic texts into a more conversational style, suitable for communication on social media. To support this task, two parallel datasets are created: one in Italian, based on certified data provided by ANSA.it, and one in English, built from a corpus of news articles from various international agencies. These datasets consist of pairs of journalistic-style texts and their corresponding conversational-style versions. Based on this data, four style transfer models are defined, all using encoder-decoder architectures: for English, the T5 1.1 foundational model is used as starting point; for Italian, mT5 is employed. Both languages are modeled in base and small versions, to ensure efficiency even in low-resource environments. To evaluate the models, two style classifiers are developed, one for each language, based respectively on RoBERTa (English) and XLM-RoBERTa (Italian). These classifiers aim to automatically distinguish between journalistic and conversational texts and to measure the effectiveness of the transformation. Among the optimization techniques used are knowledge distillation, allowing the small models to learn from the already-trained base models, and Low-Rank Adaptation (LoRA), which makes fine-tuning more lightweight and sustainable. Additionally, data augmentation strategies are explored through backtranslation, and the text generation phase is customized by adjusting decoding parameters to improve output quality.

Core competencies: *AI/ML, NLP, Data Analysis, Algorithms, Data Structure, ...*

Specific competencies: *Python (Pytorch, Transformers, Pandas, ...), Git, ...*

YUP

February 2024 - June 2024

Mattia Piazzalunga, Matteo Severgnini & Nicolò Urbani

[link](#)

YUP is a project born with the idea of promoting recreational parties and events, aiming to provide an accessible overview of entertainment in a given area, both for younger and older individuals. Whether it's "happy hours" or private parties, YUP presents them through an easy-to-use web application. For YUP, every user matters, which is why personalized loyalty approaches are implemented. Even organizers make use of YUP. The web app allows for managing customers, loyalty programs, and bookings.

Core competencies: *Project Managament, Software Engineering, Software Architecture, Full-Stack Development, OOP, REST API, Algorithms, Data Structure, ...*

Specific competencies: *Java (Spring, Spring Security, Spring Data, ...), SQL (MySQL), HTML5, CSS3, Javascript, Bootstrap, Thymeleaf, Docker, Git, ...*

Fake News Detection

January 2024 - January 2024

Mattia Piazzalunga & Nicolò Urbani

[link](#)

"Fake news" represent a central issue in today's society, a phenomenon that has been intensified by the rise of social media, which has facilitated their spread. Automatically detecting them thus becomes a key challenge for research. In this project, a comparative study was carried out by adapting various deep learning techniques to the task, achieving state-of-the-art results on two benchmark datasets for fake news detection: ISOT Fake News Dataset and WELFake.

Core competencies: AI/ML, NLP, Data Analysis, Algorithms, Data Structure, ...

Specific competencies: Python (Pytorch, Transformers, Pandas, ...), Git, ...

Electronic Invoice Management ★

March 2022 - June 2022

PwC, Digital Innovation Team

[link](#)

During my internship at PwC, I actively contributed to the conceptual and implementation extension of Electronic Invoice Management (EIM), an enterprise application designed for businesses. EIM supports the proper processing of both domestic and cross-border electronic invoices, whether outgoing or incoming. This solution enables the management of invoice flows to and from the SDI (Sistema di Interscambio - Exchange System) and ensures their compliant archiving with a government-certified partner. It also allows for effective and efficient consultation through integration with a document repository. An additional feature is the daily verification of the correct issuance and receipt of invoices through integration with a reconciliation add-on component.

Core competencies: Project Management, Software Engineering, Software Architecture, Full-Stack Development, OOP, REST API, Algorithms, Data Structure, ...

Specific competencies: Java (Spring, Spring Security, Spring Cloud, Spring Data, ...), SQL (MySQL, PostgreSQL, ...), HTML5, CSS3, Javascript, Bootstrap, Docker, Microsoft Azure, Git, ...

Punto Aido "Soffio Vitale"

September 2016 - March 2017

AIDO, ASST Papa Giovanni XXIII & AT di Bergamo

[link](#)

In 2017, I collaborated with other young people on the creation of a multimedia information station called "Punto AIDO - Soffio Vitale", located inside the Hospital Street of ASST Papa Giovanni XXIII. It is a touchscreen station, still active today, and is seen by approximately 10,000 people every day. Its aim is to promote organ donation. The project involved numerous organizations and institutions, including various AIDO sections, ASST Papa Giovanni XXIII, Ufficio Scolastico Territoriale of Bergamo, the G. Marconi Institute (for the development of the application), and Azienda Bergamasca Formazione (for the physical construction of the totem). The success of the initiative was evident from the start: in the first three years, as many as 1,561 people chose to become donors thanks to the station.

Core competencies: Full-Stack Development, OOP, REST API, ...

Specific competencies: HTML5, CSS3, Javascript, Bootstrap, Git, ...

CERTIFICATIONS

Associate in Python Programming - Python Essential 2 ★

September 2025 - now

Python Institute & Cisco NetCad

[link](#)

The certification attests to skills in programming with the Python language, verifying the ability to tackle coding tasks related to the core aspects of development. It particularly concerns mastery of the language's logic and structure, correct use of keywords, statements, and indentation rules, as well as the handling of variables, operators, and data types. It also covers input and output operations, flow control mechanisms through conditional blocks and loops, and the use of main data structures such as lists, tuples, dictionaries, and strings. The certification further highlights the ability to work with functions, both built-in and user-defined, including techniques such as decomposition, recursion, and the use of generators. Exception handling, with attention to their hierarchies, is also included, along with knowledge of the essential elements of Python syntax, semantics, and runtime environment. In this way, it provides a solid and structured foundation for developing Python software solutions.

Entry-Level Python Programmer - Python Essential 1

June 2025 - now

Python Institute & Cisco NetCad

[link](#)

The certification attests to skills in programming with the Python language, verifying the ability to tackle coding tasks related to the core aspects of development. It particularly concerns mastery of the language's logic and structure, correct use of keywords, statements, and indentation rules, as well as the handling of

variables, operators, and data types. It also covers input and output operations, flow control mechanisms through conditional blocks and loops, and the use of main data structures such as lists, tuples, dictionaries, and strings. The certification further highlights the ability to work with functions, both built-in and user-defined, including techniques such as decomposition, recursion, and the use of generators. Exception handling, with attention to their hierarchies, is also included, along with knowledge of the essential elements of Python syntax, semantics, and runtime environment. In this way, it provides a solid and structured foundation for developing Python software solutions.

English B2 ★

December 2019 - now

Rosetta Stone

[link](#)

The owner of the English B2 certification has a proven proficiency in the English Language corresponding to level B2 of the CEFR (Common European Framework of Reference for languages).

PROFESSIONAL & LANGUAGE SKILLS SUMMARY

Core Competencies

My profile lies at the intersection of **Software Engineering** and **Artificial Intelligence**, with a specific focus on **Deep Learning**. I am currently conducting research in the field of **Natural Language Processing**, which represents the core of my current professional interests. In parallel, I have developed solid experience in **Information Retrieval** and **Data Analysis**, skills that allow me to analyze and interpret complex and unstructured data, deriving meaningful insights from it.

My background also includes proven experience in developing highly structured and complex software, where advanced skills in **Project Management** and **Software Architecture** prove to be essential. I am strongly oriented toward code quality, maintainability, and scalability of solutions. My expertise in **Full-Stack Development**, **Cloud Computing**, and **REST API** integration enables me to design and implement complete, modular, and distributed software solutions, ready for production environments.

My academic and professional training is firmly rooted in computer science: concepts such as **Object-Oriented Programming**, **Algorithms and Data Structures**, **Operating Systems**, and **Computer Networks** form the foundation on which I build every project, whether it is focused on Artificial Intelligence or Software Engineering.

Programming Languages & Technologies

During my research journey in the field of **Artificial Intelligence**, with a particular focus on **Natural Language Processing**, I have developed strong skills in using **Python**, leveraging advanced libraries such as **PyTorch**, **Transformers**, and **Pandas**. These tools have proven essential for designing **Deep Learning** models and efficiently processing large volumes of data.

For the development of complex and scalable enterprise software, I prefer **Java**, fully utilizing the **Spring** ecosystem (including **Spring Boot**, **Spring MVC**, **Spring Data**, **Spring Security**, and **Spring Cloud**). Alongside Java, I have gained experience with **Node.js**, **PHP** and **C#**, which I consider valid alternatives for backend development in different contexts, whether in monolithic architectures or microservices. In the database domain, I have solid expertise in working with relational databases using **SQL**, with particular attention to RDBMS such as **MySQL** and **PostgreSQL**, which I use for data modeling, optimization, and management. On the frontend side, I build modern and responsive web interfaces using **JavaScript**, **HTML5**, **CSS3**, **Thymeleaf** and **Bootstrap**, with a strong focus on usability and smooth integration with RESTful services.

Tools & Platforms

I regularly use **Git** for version control and **Docker** for containerization, enabling consistent development environments and streamlined deployment workflows.

Languages

Linguistic skills include **native Italian** and **professional-level English**, certified at B2.

HONOURS AND AWARDS

Top 15% students worldwide ★

Golden Key International Honour Society

February 2025

Worldwide - [link](#)

Recognition as a student among the top 15% in the world. The Golden Key International Honour Society is the largest collegiate honor society in the world, recognizing academic excellence among undergraduate and graduate students. Membership is by invitation and is reserved for the top 15% of students.

Third place "XIII Premio Gelmi" ★

Bosch

January 2025

Italy - [link](#)

Third place for the best master's thesis in Italy on the topic "Artificial Intelligence: Challenges, Opportunities, and Risks" for the 2024.

Ph.D. scholarship 2024-2027 ★

University of Milano-Bicocca

August 2024

Milano, IT - [link](#)

Three-year Ph.D. scholarship funded within the project of excellence 2023-2027 ReGAIInS of the DISCo department of the University of Milano-Bicocca. The scholarship is themed "Artificial Intelligence for improvement of social and individual well-being". With an acceptance rate of about 10%, the Ph.D. program of the DISCo Department is highly selective.

Web Summit scholarship, 2023

Web Summit

October 2023

Europe - [link](#)

Scholarship to participate in Web Summit Lisbon 2023 intended for a group of European students who have shown eagerness and enthusiasm in joining a global network that stands out for work and research in the tech world.

University merit credits, 2021/2022

University of Milano-Bicocca

December 2022

Milano, IT

Merit credits received for the academic year 2021/2022. Merit Credits are a initiative aimed at financially rewarding the academic excellence of students who graduate on track with a grade of at least 105/110 with honors.

University merit credits, 2020/2021

University of Milano-Bicocca

December 2021

Milano, IT

Merit credits received for the academic year 2020/2021. Merit Credits are a initiative aimed at financially rewarding the academic excellence of students who are on track with their exams and with an average grade equal to or higher than 27/30 with honors.

University merit credits, 2019/2020

University of Milano-Bicocca

December 2020

Milano, IT

Merit credits received for the academic year 2021/2022. Merit Credits are a initiative aimed at financially rewarding the academic excellence of students who are on track with their exams with an average grade equal to or higher than 27/30 with honors.

High school merit-based scholarship, 2018/2019

Bonate Sopra Municipality

December 2019

Bonate Sopra, IT

Merit scholarship received for the academic year 2018/2019. This recognition is awarded to excellent students who graduate with a grade greater than or equal to 80/100.

High school merit-based scholarship, 2017/2018

Bonate Sopra Municipality

December 2018

Bonate Sopra, IT

Merit scholarship received for the academic year 2017/2018. This recognition is awarded to excellent students with an average grade greater than or equal to 7/10.

High school merit-based scholarship, 2016/2017

Bonate Sopra Municipality

December 2017

Bonate Sopra, IT

Merit scholarship received for the academic year 2016/2017. This recognition is awarded to excellent students with an average grade greater than or equal to 7/10.

Second place "storie di alternanza", 2017

Camera di Commercio Bergamo

November 2017

Bonate Sopra, IT

In 2017, the project I collaborated on, "Punto AIDO - Soffio Vitale", received the "Storie di alternanza" award, promoted by the Camera di Commercio Bergamo. This recognition is dedicated to the best school-to-work transition projects developed within the region. The award, granted in a highly competitive context with over 2,300 participants between 2017 and 2022, highlighted the project's originality, social impact, and communicative effectiveness. The project, an interactive multimedia information station designed to raise public awareness on the topic of organ donation, was the result of a collaboration between various organizations and institutions, including AIDO, the Ufficio Scolastico Territoriale of Bergamo, ASST Papa Giovanni XXIII, the G. Marconi Institute (which handled the software development), and Azienda Bergamasca Formazione (responsible for the physical construction).

IO & Lode

Confindustria

May 2016

Bergamo

Recognition for outstanding students of Bergamo (IT) high schools.

High school merit-based scholarship, 2015/2016

Bonate Sopra Municipality

December 2016

Bonate Sopra, IT

Merit scholarship received for the academic year 2015/2016. This recognition is awarded to excellent students with an average grade greater than or equal to 7/10.

High school merit-based scholarship, 2014/2015

Bonate Sopra Municipality

December 2015

Bonate Sopra, IT

Merit scholarship received for the academic year 2014/2015. This recognition is awarded to excellent students with an average grade greater than or equal to 7/10.

EXTRA ACTIVITIES

Tutor, Computer Science & Math

August 2017 - now

Since 2017 accumulated more than 3,500 hours of teaching in Computer Science, Math and related subjects, supporting more than 40 students from high schools, universities and including adults.

CONFERENCE CONTRIBUTIONS AND INVITATIONS

Judge at Marconi's Day 2025

I.T.I. G. Marconi

May 29-31, 2025

Bergamo, IT

Marconi's Day is the flagship event of the G. Marconi Institute in Bergamo, which won the prestigious "Top 10 World's Best School Prize for Innovation" awarded by T4 Education. It is an annual gathering dedicated to celebrating the most innovative student projects. The 2025 edition saw the participation of 1,400 students and the presentation of over 250 projects, which ranged across various topics, from energy to equal opportunities. I had the honor of being part of the judging panel, alongside representatives from leading companies such as Siemens, ABB, Schneider Electric, MSI, BREMBO, STMicroelectronics, Tenaris, ENGIE, Hevolus Innovation, Adecco and lots of other industry leaders.

Judge at Marconi's Day 2024

I.T.I. G. Marconi

May 31-June 1, 2024

Bergamo, IT

Marconi's Day is the flagship event of the G. Marconi Institute in Bergamo, which won the prestigious "Top 10 World's Best School Prize for Innovation" awarded by T4 Education. It is an annual gathering dedicated to celebrating the most innovative student projects. The 2024 edition saw the participation of

1,300 students and the presentation of over 250 projects, reflecting the growing quality and diversity of the ideas showcased. I had the honor of being part of the judging panel, alongside representatives from leading companies such as Siemens, Adecco, STMicroelectronics, Tenaris, ENGIE, Micron Technology, and 15 other industry leaders.

Judge at Marconi's Day 2023

May 26-27, 2023

I.T.I. G. Marconi

Bergamo, IT

Marconi's Day is the annual event organized by the G. Marconi Institute of Bergamo, a school that in 2024 was awarded the prestigious "Top 10 World's Best School Prize for Innovation" awarded by T4 Education. Every year, the institute promotes this initiative to recognize and reward the best student projects. The 2023 edition welcomed over 3,000 attendees, including 1,300 students and more than 70 projects. I had the pleasure of serving as a judge alongside representatives from leading organizations such as Siemens, Microsoft, Tenaris, Unipol, and other prominent companies in the industrial and tech sectors.

Laboratory presenter, Bergamo Scienza 2017

October 9-15, 2017

Bergamo Scienza

Bergamo, IT

The Bergamo Scienza Association was founded in 2005, following the great success of the first two editions of the namesake science festival. The impact of the festival has been remarkable: in 2024 alone, 409,000 people attended 151 workshops, 17 shows, and 31 conferences, which featured three Nobel Prize winners. In 2017, I led a workshop that combined mathematics and literature.

CONFERENCE AS ATTENDEE AND SUMMER SCHOOLS

European Summer School on Information Retrieval 2026 ★

July 27-31, 2026

ESSIR

Bucharest, RO - [link](#)

European Summer School on Information Retrieval 2026 is the 17th edition of the long-running ESSIR series. Established in 1990, ESSIR has more than 30 years of history and is one of Europe's most prominent summer schools dedicated to Information Retrieval and the broader field of information access. Held in Bucharest at the Campus Research Institute of the National University of Science and Technology Politehnica, the school is organized in cooperation with TU Wien University and CEA LIST. The intensive program combines foundational and advanced lectures on Information Retrieval, Retrieval-Augmented Generation, Large Language Models, and neural and generative search. In addition to lectures, the school includes hands-on sessions, a practical hackathon, a final exam, and several social and networking activities, bringing together students, researchers, and industry professionals from the international IR community.

Reinforcement Learning Summer School 2026 ★

June 3-12, 2026

European Laboratory for Learning and Intelligent Systems

Milan, IT - [link](#)

Reinforcement Learning Summer School 2026 is an intensive in-person summer school dedicated to the foundations and latest frontiers of Reinforcement Learning, held in Milan at the Politecnico di Milano. Organized by the Politecnico di Milano and the University of Milan, jointly with ELLIS Unit Milan, the school brings together Master's students, Ph.D. students, researchers, post-docs and professionals interested in specializing in RL research. The program covers core and advanced topics such as dynamic programming, policy gradients, deep reinforcement learning, bandits, multi-agent RL, RL and LLMs, real-world RL, robotics and RL for health. In addition to lectures, the event includes practical sessions, poster sessions, and networking opportunities with peers and senior experts. Participation was selective, with an acceptance rate of 32.5%.

PyTorch Conference Europe 2026 ★

April 7-8, 2026

PyTorch Foundation & The Linux Foundation

Paris, FR - [link](#)

PyTorch Conference Europe 2026 is the inaugural European edition of the official PyTorch conference, held in Paris. Organized by the PyTorch Foundation under the The Linux Foundation, the two-day event brings together researchers, developers, practitioners, and academics working across the open-source machine learning ecosystem. The 2026 program features more than 95 sessions across 8 tracks, covering topics

such as GenAI and multimodal systems, training and inference, frameworks and compilers, responsible AI and compliance, security and privacy, and real-world applications. The event hosts around 600 attendees and includes keynotes, technical talks, hands-on workshops, networking activities, and a community expo, making it a valuable opportunity to explore the latest developments in PyTorch and applied AI.

AI WEEK 2025 ★

May 13-14, 2025

AI WEEK

Milan, IT - [link](#)

AI WEEK is the biggest event in Europe on Artificial Intelligence. Held annually in Milan, it brings together innovators, startups, corporates, researchers, and policymakers to explore the technologies shaping the future. The event welcomes thousands of attendees from across Europe and beyond. With hundreds of exhibitors and dozens of expert speakers, AI Week Milan covers topics from generative AI and automation to ethics and regulation. The event attracts over 17,000 attendees, with a 25% share of international visitors from Switzerland, Germany, France, Romania, the United Kingdom and the United States. More than 200 companies exhibit, and over 500 speakers participate.

Neurons are trees! Should AI reckon with neuroscience?

March 27, 2024

Giorgio A. Ascoli

Milano, IT

The seminar discusses the fundamental principles of how the brain works, highlighting how neurons communicate with each other and adapt based on experience. It emphasizes that, unlike current artificial intelligence models, the human brain uses highly selective connections and complex structures that allow it to learn efficiently and flexibly. Finally, it suggests that drawing greater inspiration from these biological mechanisms could lead to significant innovations in the field of machine learning.

Web Summit 2024 ★

November 11-14, 2024

Web Summit

Lisbon, ES - [link](#)

Web Summit is one of the world's leading technology events. It takes place every year in Lisbon and brings together startups, investors, companies, media, and industry leaders to explore innovations that shape the future. The event attracts over 71,000 attendees from 153 countries. More than 3,000 companies exhibit, and over 950 speakers participate. Artificial intelligence plays a central role. Diversity is a key focus, 44% of startups are founded by women. Hundreds of themed meetups make the experience even richer, helping professionals from all over the world connect and share ideas.

Mediterranean Machine Learning Summer School 2024 ★

September 9-13, 2024

AI education foundation & Google DeepMind

Milano, IT

The Mediterranean Machine Learning Summer School 2024 is a prestigious educational event dedicated to the fields of artificial intelligence and machine learning, organized in collaboration between the AI education foundation and the University of Milano-Bicocca. For five days, participants from around the world engage in an intensive program featuring keynote speeches, theoretical lectures, and hands-on sessions, led by internationally renowned experts from research centers such as Google DeepMind, Meta AI, and the University of Oxford. The event explores some of the most cutting-edge topics in the field, including generative models, LLMs, reinforcement learning, neuroscience, and AI safety. In addition to its educational focus, the event promotes discussion, collaboration, and networking through small-group workshops, poster sessions, meetings with sponsoring companies, and social events designed to foster exchange between participants and speakers.

Lectures on Computational Linguistics 2024 ★

June 19-21, 2024

AILC

Bari, IT - [link](#)

The Lectures on Computational Linguistics is a scientific event organized by the Italian Association for Computational Linguistics, designed as a training and discussion opportunity on current topics in the field. The 2024 edition, hosted by the University of Bari Aldo Moro, brings together humanistic and computational approaches through tutorials, hands-on labs, and evening lectures, offering an open and interdisciplinary space for students, researchers, and enthusiasts. The program features contributions from

professors from various international universities, fostering a rich and stimulating dialogue. Participation is free upon registration.

Large Language Models nel panorama italiano: scienza, industria e società June 6, 2024
AILC Milano, IT

“Large Language Models in the Italian Landscape: Science, Industry, and Society” is a public outreach event organized by AILC and the University of Milano-Bicocca, aimed at exploring the role and impact of large language models in Italy. Featuring contributions from experts in academia, industry, and public institutions, the event addresses scientific, technical, ethical, and regulatory issues related to LLMs, offering an up-to-date and multidisciplinary perspective on the topic.

AWS Summit Milano 2024 May 23, 2024
Amazon Milano, IT

The AWS Summit in Milan is a major event dedicated to the world of Amazon Web Services, bringing together thousands of participants to explore technologies, use cases, and innovations in the cloud. The 2024 edition features international keynotes, over 100 talks, and a special focus on generative artificial intelligence, with insights into emerging techniques such as Retrieval-Augmented Generation. A unique opportunity in Italy for training, networking, and staying up to date in the tech sector.

Global Azure Milano 2024 April 18, 2024
Improve Milano, IT - [link](#)

Global Azure Milano 2024 is a full-day event entirely dedicated to Microsoft Azure. Hosted at the Microsoft House in Milan, the event features technical talks, use cases, and hands-on demos, offering participants a comprehensive overview of the platform’s potential across AI, cloud-native development, security, and multicloud solutions.

Microsoft Ignite March 26, 2024
Microsoft Milano, IT

Microsoft Ignite 2024 is a digital innovation event that makes a stop in Milan, placing the spotlight on the impact of generative AI in the business world. Through keynotes, demos, and roundtables focused on solutions like Microsoft Copilot, the initiative offers a concrete look at technological evolution and the role of artificial intelligence in the workplace. It’s a valuable opportunity for professionals and decision makers to explore trends, tools, and strategies shaping the digital future.

Web Summit 2023 November 13-16, 2023
Web Summit Lisbon, ES - [Link](#)

Web Summit is one of the largest and most important events in the world dedicated to technology and innovation, held annually in Lisbon. It brings together startups, investors, companies, media, and industry leaders from around the globe. The 2023 edition welcomes over 70,000 participants from 153 countries, confirming its role as a key platform for those who want to understand and shape the digital future. With inspiring talks, networking opportunities, pitch competitions, and discussions on key topics such as artificial intelligence and sustainability, the event once again proves to be a unique space to connect with ideas, people, and opportunities.

Codemotion Conference Milano 2023 October 23-24, 2023
Codemotion Milano, IT l [link](#)

Codemotion Milan is the tech event that brings together the largest tech community in Europe. The 2023 edition features over 100 speakers across more than 80 sessions during 2 days filled with inspiration, learning, and networking. It is a unique opportunity to stay up to date on trends like artificial intelligence and software engineering.

Search Engines: From the Lab to the Engine Room, and Back May 29, 2023
Prabhakar Raghavan Milano, IT

The lectio magistralis smoothly and thoroughly addresses the topic of the evolution of search engines,

focusing in particular on their impact on daily life and how they are changing with the advent of artificial intelligence, especially large language models (LLMs). It offers an in-depth view of how these technologies are developing, illustrating the path from laboratory research to real-world application in today's search engines, and vice versa.

La matematica tra il nulla ed il tutto

September 3-5, 2018

Piano Nazionale Lauree Scientifiche & University of Bergamo

Bergamo, IT - [link](#)

The Summer School "MLa matematica tra il nulla ed il tutto" is an initiative aimed at outstanding high school students, organized by the University of Bergamo as part of the Piano Nazionale Lauree Scientifiche. Over three days of lectures, workshops, and conferences, the event introduces students to mathematical thinking and the scientific method, exploring connections with art, finance, technology, and language, while also involving teachers in dedicated training sessions.

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