

Lorenzo Corti

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Montano Lucino, via Cantalupo 2, 22070, Italy | Date of birth: 30 / 05 / 1995

EDUCATION

POLITECNICO DI MILANO

M.Sc. IN COMPUTER SCIENCE AND ENGINEERING

Sept. 2017 - Dec. 2019 | Como, IT
Final Score: 110 / 110

Thesis: Time Conditional Generative Adversarial Networks for Augmentation of Irregularly Sampled Time Series
Supervisor: Marco Brambilla (DEIB - Politecnico di Milano)
Co-advisor: Pavlos Protopapas (IACS - Harvard University)

POLITECNICO DI MILANO

B.Sc. IN ENGINEERING OF COMPUTING SYSTEMS

Oct. 2014 - Jul. 2017 | Como, IT
Final Score: 98 / 110

LANGUAGES

Italian: native
English: FCE B2

COURSEWORK

MASTER OF SCIENCE

Web Science, Advanced Software Engineering, Computer Graphics, Database Systems 2, Privacy and Security, Computer Systems, Advanced Web Technologies, Advanced Computer Architectures, Pervasive Systems, Internet of Things, Machine Learning, Information Retrieval and Data Mining, Mobile Applications, Cognitive Robotics, Computer Systems, Performance Evaluation of Computer Systems

BACHELOR OF SCIENCE

Fundamentals of Computer Science, Computer Architectures and Operating Systems, Algorithms and Principles of Computer Science, Data Bases, Software Engineering, Systems for Data Acquisition, Digital Logic Design, Informatic Technologies for the Web 1, The Internet and Communication Networks

SKILLS

Python • Java • Javascript • HTML • CSS
C • C++ • Swift • Assembly 8086 • MIPS

RESEARCH EXPERIENCE

POLITECNICO DI MILANO | RESEARCH FELLOW

Feb. 2020 - Jan. 2022

TRENDS IN GLOBAL GOVERNANCE AND EUROPE'S ROLE (TRIGGER)

Feb. 2020 - Jan. 2022

EU H2020 funded project. Design and development of the citizen engagement platform COCTEAU (Co-Creating the European Union) and the public engagement toolkit PERSEUS (Public Engagement for Responsive and Shared EU Strategies).
Related activities:

- Expert validation activities for COCTEAU (New York University's GovLab, OECD, Bocconi University Milan, JRC and EPRS)
- Organization of the Young Thinkers Initiative held at CEPS's IdeasLab 2021

PAN-EUROPEAN RESPONSE TO THE IMPACTS OF COVID-19 AND FUTURE PANDEMICS AND EPIDEMICS (PERISCOPE)

Mar. 2021 - Jan. 2022

EU H2020 funded project. Extension and contextualization of COCTEAU and PERSEUS (outcomes of the TRIGGER project) for the analysis of the COVID-19 global pandemic.

VACCINITALY

Feb. 2021 - Jan. 2022

Monitoring Italian conversations around vaccines on social media (Twitter, Facebook) to understand the interplay between online public discourse, vaccine hesitancy and uptake rates.

TEACHING EXPERIENCE

POLITECNICO DI MILANO | TEACHING ASSISTANT

SOFTWARE METHODOLOGIES AND ARCHITECTURES FOR SECURITY - ENTERPRISE ICT ARCHITECTURES (MODULE 1)

2021 edition; Sept. - Dec. 2021

2020 edition; Sept. - Dec. 2020

MSc joint degree program with Bocconi University Milan.

FUNDAMENTALS OF COMPUTER SCIENCE

2021 edition; Sept. - Dec. 2021

Online Computer Science & Engineering bachelor degree program.

CEFRIEL & QUANTIA CONSULTING | TEACHING ASSISTANT

MASTER CLOUD DATA ARCHITECT

• Mar. 2021 - ELK Stack

• July 2021 - ELK & NoSQL (MongoDB, Neo4j, Cassandra) programming

MASTER IN DATA SCIENCE - OCT. 2021

• Generative Adversarial Networks

MASTER BIG DATA SCIENCE FOR ALLIANZ - NOV. 2021

• Working with Cassandra in Python

• Generative Adversarial Networks

PROJECTS

RESEARCH FELLOW - POLITECNICO DI MILANO

COCTEAU - CO-CREATING THE EUROPEAN UNION

COCTEAU is a gamified, crowdsourcing tool that has the goal of enabling large-scale citizen engagement and co-creation in support of policymakers when approaching complex governance solutions.

PERSEUS - PUBLIC ENGAGEMENT FOR RESPONSIVE AND SHARED EU STRATEGIES

PERSEUS is an integrated toolkit within the TRIGGER project linked to the concept of actorness and supported by data science techniques like NER, topic extraction, sentiment analysis and, language models. PERSEUS also includes a resource search functionality powered by Elasticsearch.

IDIOM - INFORMATION AND DISINFORMATION IN ONLINE MEDIA

IDIOM is a data analysis pipeline collecting data from social and news media sources and runs NLP and ML analyses. The final purpose is to create a publicly available dashboard raising citizen awareness about misinformation.

MASTER OF SCIENCE - POLITECNICO DI MILANO

ADVANCED SOFTWARE ENGINEERING

Definition of a modeling language that supports the specification of data analysis pipelines. Delivered: abstract syntax, concrete graphical syntax, modeling tool, model-to-text transformations for logging and executable code.

Frameworks / Languages: Eclipse Modeling Framework, Java

WEB SCIENCE

Analysis of social media hashtags and check-ins, weather forecast, smart cameras output and parking lots data logs for the city of Como.

Frameworks / Languages: Scala, R

DATABASE SYSTEMS 2

Implementation based on Redis of part of the stream processing functionalities offered by Esper.

Frameworks / Languages: Asynchronous Javascript

ADVANCED WEB TECHNOLOGIES

Development of a web application for the validation of geographical data with a crowdsourcing approach. One of the goals of the activity was to understand how to correctly and efficiently partition the software components between back-end, middle layer and front-end.

Frameworks / Languages: Spring, Java EE, Javascript, SQL

PERVASIVE SYSTEMS

Design and implementation of a solution for detecting whether a person affected by Dementia is correctly dressed. This was done via a combination of iBeacon tags, weather data from DarkSky and ESP32 for processing and controlling actuators.

Frameworks / Languages: C++

MOBILE APPLICATIONS

Replica of the board game 'Labyrinth' on iOS. Game logic and animations natively implemented in Swift.

Frameworks / Languages: Swift

BACHELOR OF SCIENCE - POLITECNICO DI MILANO

SOFTWARE ENGINEERING

Development of a planning application for an hypothetical marketing company with the end goal of learning the software engineering methodology as well as the advantages of using design patterns.

Frameworks / Languages: Java, I*, UML, SQL

DATA ACQUISITION SYSTEMS

Design and implementation of a small system for acquiring proximity readings from a sensor on an Arduino board and later processed in LabVIEW.

Frameworks / Languages: C

WEB TECHNOLOGIES

Development of a web application for crowdsourcing campaigns in which users are able to upload photos of mountains, validate them and annotate the different skylines.

Frameworks / Languages: Java EE, Javascript, SQL

PUBLICATIONS

- [1] M. Di Giovanni et al. "A Content-based Approach for the Analysis and Classification of Vaccine-related Stances on Twitter: the Italian Scenario". In: June 7, 2021. doi: [10.36190/2021.52](https://doi.org/10.36190/2021.52). url: http://workshop-proceedings.icwsm.org/pdf/2021_52.pdf.
- [2] D. Di Marco, A. Tocchetti, and M. Corti L. Brambilla. *Scaling collaborative policymaking: how to leverage on digital co-creation to engage citizens*. Aug. 2021. doi: [10.5281/zenodo.5227881](https://doi.org/10.5281/zenodo.5227881). url: <https://doi.org/10.5281/zenodo.5227881>.
- [3] A. Mauri et al. "COCTEAU: An Empathy-Based Tool for Decision-Making". In: *Companion Proceedings of the Web Conference 2022. WWW '22*. Virtual Event, Lyon, France: Association for Computing Machinery, 2022, pp. 219–222. isbn: 9781450391306. doi: [10.1145/3487553.3524233](https://doi.org/10.1145/3487553.3524233). url: <https://doi.org/10.1145/3487553.3524233>.
- [4] F. Pierri et al. *VaccinItaly: monitoring Italian conversations around vaccines on Twitter and Facebook*. 2021. doi: [10.36190/2021.11](https://doi.org/10.36190/2021.11). url: http://workshop-proceedings.icwsm.org/pdf/2021_11.pdf.
- [5] A. Tocchetti et al. "A Web-Based Co-Creation and User Engagement Method and Platform". In: *Lecture Notes in Computer Science*. Springer International Publishing, May 11, 2021, pp. 496–501. doi: [10.1007/978-3-030-74296-6_38](https://doi.org/10.1007/978-3-030-74296-6_38). url: https://doi.org/10.1007/978-3-030-74296-6_38.
- [6] A. Tocchetti et al. "EXP-Crowd: A Gamified Crowdsourcing Framework for Explainability". In: *Frontiers in Artificial Intelligence* 5 (2022). issn: 2624-8212. doi: [10.3389/frai.2022.826499](https://doi.org/10.3389/frai.2022.826499). url: <https://www.frontiersin.org/article/10.3389/frai.2022.826499>.