# Desiree MANICARDI desiree.manicardi@gmail.com

PhD in "Computer Science and

Computational Mathematics"

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Computer Skills

Strenghts

Database SQL During my university studies, I did two projects and the Bachelor's thesis using SQL.

**NoSQL** During my university studies, I did two projects using NoSQL.

Programming Java I have been studying this language since 2013.

During my university studies, I did six projects using Java.

I tutored this language at the University of Insubria during the A.Y. 2020-2021 and

2021-2022.

**Python** I have been using Python for my research since 2020.

During the A.Y. 2020-2021, I served as an adjunct professor of this language at the University of Turin.

Object-Oriented Programming

Good - Intermediate

Backend Node.js

Command- Terminal

line Tools PowerShell

**CMD** 

Database MySQL, MongoDB, PostgreSQL

Normalization

Diagrams UML, ER

E-mail E-mail and Italian Certified e-mail (PEC, Posta Elettronica Certificata)

Environment Eclipse

Markup LaTeX

Office Office suite (Microsoft Office and Open Office)

OS Windows

**Programming** C, C++, C#

Parallel, distributed and concurrent programming

Security Antivirus System

Authentication

Tools pgAdmin, Node-RED

Version GitHub

Control

Systems

Web HTML, CSS, JavaScript, JQuery I'm managing a personal website since December

2023.

PHP

**JSON** 

AJAX

Angular

Single-page applications, static applications

WordPress From January 2013 to February 2021, I managed a blog where I put

motivational quotes.

Knowledge

project involving testing, I have not yet worked with a specific code testing framework,

such as Jest.

Database Hippocratic Databases

Diagrams Kaos, Problem Frames

Environment AndroidStudio I developed three Android apps for the Mobile Programming course

during my Bachelor's degree.

Arduino UNO

Weka

Unity

Model Client-Server

Network Putty I used it for my Bachelor's thesis.

management

OS Linux

MacOS

Mobile - Android

**Programming** R

Real-time programming

API REST

I used Twitter API for my Bachelor's thesis.

Bash

VisualBasic

Pascal

ArduinoUNO's programming language

Assembly

**Security** OAuth I used it for my Bachelor's thesis.

RBAC (Roll-Based Access Control)

**Web** ASP I studied it in the High School.

Software Gephi Version Git Control Systems

#### Certifications

 $\textbf{Computer} \quad \textbf{Google digital training - Fondamenti di marketing digitale}, \ \textit{Google}, \ 06/2020$ 

Science **Técnicas Cuantitativas y Cualitativas para la Investigación**, *EdX*, *Universidad Politécnica de Valencia*, 01/2019

Data Access in C# and .NET Core, EdX, Microsoft, 09/2018

Asynchronous Programming with Javascript, EdX, Microsoft, 08/2018 Introduction to Python: Absolute Beginner, EdX, Microsoft, 08/2018

Architetture orientate ai servizi, *University of Insubria*, 06/2018 Sistemi organizzativi a rete, *University of Insubria*, 06/2018

Mathematics IGCSE Mathematics Extended, University of Cambridge, 06/2013

IGCSE Mathematics Core, University of Cambridge, 06/2012

### Specific Computer Science Training Activities and Courses

- 1. July 2017: "Agile Software Development", provided by Institute University of Minnesota, edX;
- 2. July 2017: "Queuing Theory: from Markov Chains to Multy-Server Systems", provided by Institute Mines-Télécom, edX;
- 3. August 2018: "Using Python for Research", University of Harvard, edX;
- 4. August 2018: "Computing in Python II: Control Structures", The Georgia Institute of Technology, edX:
- 5. August 2018: "Computing in Python IV: Objects & Algorithms", The Georgia Institute of Technology, edX;
- 6. 28<sup>th</sup> February 2019: "Digital Wellbeing", provided by Google Digital Training;
- 7. 16<sup>th</sup> November 2020: "NeuroSpine", V International Meeting, Regeneration & Rehabilitation in Brain and Spinal Cord Injuries, provided by IITM (International Institute of Tele-Medicine);
- 8. 17<sup>th</sup> November 2020: "NeuroInformatica", IX Workshop Nazionale, Intelligenza Artificiale, NeuroRobotica, BCI, Teleneurologia, provided by IITM (International Institute of Tele-Medicine);
- 9. 25<sup>th</sup> November 2020: "Apprendere con i robot" provided by ComoNExT Innovation Hub and Agenzia per lo Sviluppo del Canavese;
- 10. 10<sup>th</sup> December 2020: webinar "Product accelerator per l'innovazione", provided by ComoNExT Innovation Hub and ST Microelectronics;
- 11. 14<sup>th</sup> December 2020: "Diversity & Cybersecurity: Woman Entrepreneurship Webinar" provided by Concordia;
- 12. 25<sup>th</sup> January 2021: "A look inside the black box of scientific publishing" provided by Dr. Matteo Cavalleri;
- 13. 28<sup>th</sup> January 2021: "Machine learning in Physics. A general overview" provided by Dr. Marco

- Landoni, INAF, University of Insubria;
- 14. 4<sup>th</sup> February –12<sup>th</sup> March 2021: "Bioinformatics" provided by Prof. Gianluca Molla, University of Insubria;
- 15. 17<sup>th</sup> February 2021: "Realtà virtuale/aumentata e intelligenza artificiale in medicina" provided by Prof. Gabriella Balestra and Dr. Pietro Piazzolla, Politecnico di Torino, Dipartimento di Oncologia, University of Turin:
- 16. 19<sup>th</sup> February 2021: "AI: Economics, Law and Ethics An interdisciplinary approach", provided by University of Insubria;
- 17. 25<sup>th</sup> March 2021: "Toward a Composional Verification of Data-Aware Processes via Cospan-Span(Graph)" provided by Alessandro Gianola, Free University of Bozen-Bolzano;
  - \* 1<sup>st</sup> April 3<sup>rd</sup> June 2021: "Percorsi Cybersecurity" provided by CO.NE.PRO and Ordine dei Dottori Commercialisti e degli Esperti Contabili di Perugia;
  - 12. 1st April 2021: "Fondamenti di Cybersecurity";
  - 13. 15<sup>th</sup> April 2021: "Tecnologie digitali e sicurezza cibernetica";
  - 14. 30<sup>th</sup> April 2021: "Tecniche crittografiche per la protezione dei dati";
  - 15. 6<sup>th</sup> May 2021: "Tecniche crittografiche per la protezione dei dati";
  - 16. 20<sup>th</sup> May 2021: "Nuove sfide per la sicurezza informatica";
  - 17. 3<sup>rd</sup> June 2021: "Nuove sfide per la sicurezza informatica";
- 18. 5<sup>th</sup> May 2021: Riccardo La Grassa's seminar: "Classical clustering approaches in the context of deep learning";
- 19. 1st July 2021: "Diversity & Cybersecurity: Women in Cybersecurity Research" provided by Concordia;
- 20. 15<sup>th</sup> July 2021: Loan Nguyen Thanh's seminar: "User Data Analysis: Technique Overview";
- 21. 16<sup>th</sup> September 2021 25<sup>th</sup> March 2022: "Deep Learning for Pure and Applied Science" (16h), provided by Prof. Giuseppe Carleo and Dr. Filippo Vicentini, University of Lausanne, organised by Prof. Giuliano Benenti, University of Insubria;
- 22. 3<sup>rd</sup> February 2022: "La tutela di software, prodotti e servizi nell'industria ICT", provided by Camera di Commercio di Varese;
- 23. 11<sup>th</sup> March 2022: "The Curious Case of Explosive Seed Dispersal: How Nature "Exploits" Mechanics to Increase its Survival Chances", provided by Dr. Gabriella Mosca (Max Planck Institute for Plant Breeding Research);
- 24. 26<sup>th</sup> 29<sup>th</sup> May 2022: "Technologies for Processing Streaming Data Pipeline" (16h), provided by Dr. Gianfranco Modoni, Consiglio Nazionale delle Ricerche;
- 25. 12<sup>th</sup> 22<sup>nd</sup> December 2022: "Directed Networks", provided by Prof. J.J.P. Veerman, organized by Prof. Giorgio Mantica;
- 26. 21<sup>st</sup> December 2022: "Understanding Epidemics via the Theory of Dynamical System", Prof. Giorgio Mantica, University of Insubria;
- 27. 25<sup>th</sup> January 2023: "Il gioco è una cosa seria: potenzialità dei videogiochi nella ricerca, per il benessere, la diagnosi e la terapia di disordini psicologici ed il loro ruolo in contesti di isolamento sociale.", provided by Arianna Boldi, University of Turin;
- 28. 1<sup>st</sup> March 5<sup>th</sup> April 2023: "Computational Cognitive Modeling", provided by Dr. Silvia Elena Corchs, University of Insubria;
- 29. 12<sup>th</sup> April 2023: "Exemplar usable security and human factors techniques and their application to research case studies in heterogenous industries", provided by Dr. Huseyin Dogan, Bournemouth University (situated at University of Insubria);
- 30. 9<sup>th</sup> 16<sup>th</sup> June 2023: "Systems, modelling & Simulations", provided by Prof. Habib Sedehi

- (situated at University of Insubria);
- 31. 13<sup>th</sup> 15<sup>th</sup> September 2023: 24<sup>th</sup> Italian Conference on Theoretical Computer Science 2023 (Palermo, Italy)
- 32. 15<sup>th</sup> November 2023: "Fidarsi o non fidarsi della IA generativa che parla il linguaggio degli umani?" provided by Prof. Carlo Batini, University of Milan-Bicocca;
- 33. 24<sup>th</sup> February 2025: "Neuro-Symbolic Artificial Intelligence" provided by Dr. Luciano Serafini, Fondazione Bruno Kessler (situated at University of Insubria).

## APRE / For Research / Other

- 1. 9<sup>th</sup> November 2020: "Junior Researchers Session", about using software \*Research Professional, provided by University of Insubria;
- 2. 26<sup>th</sup> November 2020: "IP Management in ICT Project" provided by IPR Helpdesk;
- 3. 3<sup>rd</sup> December 2020: "IP Management in Biotechnology" provided by IPR Helpdesk;
- 4. 17<sup>th</sup> December 2020: "Verso i nuovi bandi individuali delle MSCA in Horizon Europe: Postdoctoral Fellowship" provided by APRE (Agenzia per la Promozione della Ricerca Europea);
- 5.  $11^{\text{th}} 12^{\text{th}}$  January 2021: "Percorso formativo verso Horizon Europe: scenario e prospettive del nuovo programma europeo per la ricerca e l'innovazione" provided by APRE;
- 6. 20<sup>th</sup> January 2021, "La comunicazione dei risultati della ricerca", provided by Prof. Giuseppe Tipaldo, University of Turin;
- 7. 21st January 2021: "Introduction to IP" provided by European IP Helpdesk;
- 8. 23<sup>rd</sup> March 2021: "Marie Skłodowska-Curie Actions under Horizon Europe Information Event", provided by European Commission;
- 9. 24<sup>th</sup> March 2021: "How to prepare a successful proposal in Horizon Europe", provided by European Commission;
- 10. 18<sup>th</sup> November 2021: "I finanziamenti dello European Research Council (ERC) in Horizon Europe", provided by Marco Ferraro (APRE, National Contact Point di Horizon);
- 11. 26<sup>th</sup> November 2021: "Storie di Innovazione: come dalla ricerca nasce l'innovazione... la parola ai ricercatori";
- 12. 18<sup>th</sup> February 2022: "Storie di Innovazione: come dalla ricerca nasce l'innovazione... la parola ai ricercatori";
- 13. 8<sup>th</sup> March 2022: "Diversity & Cybersecurity: Women in Cybersecurity Industry", provided by Concordia H2020:
- 14. 16<sup>th</sup> March 2022: "JoVE @ Uninsubria", provided by Alice Pistono, University of Insubria;
- 15. 18<sup>th</sup> March 2022: "Incontro helpdesk IRInSubria", provided by Scuola di Dottorato, University of Insubria;
- 16. 31<sup>st</sup> March 2022: "OECD iLibrary Training for Università degli Studi dell'Insubria", provided by James Kitchen (Public Affairs & Communications Officer dell'OECD);
- 17. 8<sup>th</sup> April 2022: "La Ricerca Collaborativa in Horizon Europe: come scrivere una proposta di successo", provided by APRE, National Contact Point di Horizon Europe;
- 18. 18<sup>th</sup> November 2022: "Come scrivere una proposta di successo nel programma Marie Skłodowska-Curie Actions in Horizon Europe", provided by APRE;
- 19. 5<sup>th</sup> December 2022: "L'impatto in Horizon Europe", provided by APRE;
- 20. 10<sup>th</sup> February 17<sup>th</sup> April 2023: "Faculty Development Program", provided by University of Insubria;
- 21. 21st March 2023: "How to use Social Media and other Channels for Research Communication",

- provided by Charlie Rapple, Kudos;
- 22. 11<sup>th</sup> May 2023: "Horizon Europe: le postdoctoral fellowships nelle azioni Marie Skłodowska-Curie Actions (MSCA)", provided by APRE;
- 23. 21<sup>st</sup> September 2023: "Pubblicare con IOP Open access and transformative agreements; how can I take advantage?", provided by CRUI, University of Insubria;
- 24. 4<sup>th</sup> 5<sup>th</sup> October 2024: "Coaching for doc", provided by Fondazione Emblema, University of Insubria;
- 25. 3<sup>rd</sup> October 2023 29<sup>th</sup> January 2024: "PON Ricerca e Innovazione 2014-2020 REACT EU", provided by Ministero dell'Università e della Ricerca.

## Other Certificates of Participation not already mentioned before

1. November 2018: "Samsung Innovation Camp", provided by University of Insubria.

#### Previous Hobbies

Quote blog From January 2013 to February 2021, I managed a blog where I put motivational quotes.

Gardening From Summer 2019 to Summer 2024, I had a small garden.