



Simone Merlo

Via Ugo Foscolo, 28
31040, Trevignano, TV, Italy

Phone: +39 0423 670719 Mobile: +39 340 8116972

Skype: Simone Merlo live:.cid.686a12f722b3d34f E-mail: simone.merlo@studenti.unipd.it

Date of birth: 07/03/2000 Nationality: Italian Mother tongue(s): Italian

EDUCATION

Graduate studies

Graduated/MSc Student in Computer Engineering
(University of Padua)

Start (22, 10) –End (24, 09)

Final Grade: 110 (over 110) cum laude

Final Degree Project: Design and Evaluation of Joint Information Retrieval and Recommender Systems

Supervisor: Nicola Ferro

Grade Point Average: 29.78 (over 30)

Undergraduate studies

First level degree in Ingegneria Informatica
(University of Padua)

Start (19, 10) –End (22, 07)

Final Grade: 110 (over 110) cum laude

Final Degree Project: Source Coding With Mixed Side Information

Supervisor: Stefano Tomasin

Grade Point Average: 29.32 (over 30)

High School

High School Diploma in Informatica e Telecomunicazioni – articolazione Informatica, IIS Einaudi-Scarpa, Montebelluna, Italy

Start (14, 09) –End (19, 07)

Grade: 100 (over 100)

OTHER RELEVANT EDUCATIONAL EXPERIENCES

- Educator and entertainer for children and teenagers. Period: (2014-2021). Hosting institution: parish of trevignano. Programme: Attended specific courses with teachers, psychologists and formers to improve personal skills (teamwork and communication) and to better learn how to relate with children. Spend some afternoons and/or weekly meetings with children and teenagers.

- Guitar courses and music band courses. Period: (2011-2019). Hosting institution: scuola di musica "Antonio Vivaldi" (Trevignano). Programme: Learn how to play the guitar and how to make music together with a group of people. This allowed me to improve my guitar playing skills and to develop autonomy in learning how to play an instrument.

- participated to several editions of OII (Olimpiadi Italiane di Informatica, Italian IT Olympics) at different levels (national, regional). Period: (2016-2018). Hosting institutions: several high schools, IIS Einaudi-Scarpa (Montebelluna), ITIS Max Planck (Treviso), ITST Marconi (Campobasso). Programme: Solve several small programming challenges involving the use of data structures and related algorithms by paying particular attention to the performance and resource usage.

- participated to "Olimpiadi della chimica" (chemistry Olympics) and "Olimpiadi della matematica" (math Olympics) at different levels (scholastic, regional). Period: (2016-2018). Hosting institutions: several high schools, IIS Einaudi-Scarpa (Montebelluna), ISS Giorgi-Fermi (Treviso). Programme: solve specific math or chemistry related problems in a limited amount of time.

- ECDL (European Computer Driving License) full standard certification. Period: (2014-2017). Hosting institution: IIS Einaudi-Scarpa (Montebelluna). Programme: Learn how to use the Microsoft Office suite programs along with some basic computer skills.

RELEVANT PROFESSIONAL EXPERIENCES

- Research Training – company: University of Padua. Start (24, 03) – End (24, 05). Tasks: research in the field of information retrieval and recommender systems. This experience required to study the current literature in the field of "joint information retrieval and recommendation" in order to better understand the strengths and the limitations of the currently developed models in this novel field. Furthermore, a deep analysis of the current state of the art model in the field of joint information retrieval and recommendation has been performed by modifying and adapting it, aiming to discover its major weaknesses.

- Artificial Intelligence Hackathon – challenge - company: UNOX Spa. Start (24, 03) – End (24, 03). Tasks: improve industrial ovens' interfaces and provide new features exploiting the most innovative technologies (LLMs and GPTs) in 24 hours. In this hackathon we mainly focused in developing a chatbot with RAG (Retrieval Augmented Generation) making use of the services offered by AWS (Amazon Web Services).

- Helpdesk IT – stage - company: Lotto Sport Italia Spa. Start (19, 05) – End (19, 06). Tasks: network management, technical support, printer management.

- Helpdesk IT – stage - company: Lotto Sport Italia Spa. Start (18, 04) – End (18, 06). Tasks: network management, technical support, printer management.

PERSONAL SKILLS

English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B2	B2	B2	B2	B2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Other known language(s)

German (basic user)

Computer skills

Advanced: Java, Python, C, SQL, SPARQL, LaTeX, HTML, CSS, Networking

Intermediate: C++, JavaScript, Docker, PyTorch library, TensorFlow library, Keras library, OpenCV library

Basic: Kotlin, AWS (Amazon Web Services), GPU programming (also distributed)

Other skills

- Team-Working and Communication skills gathered by the several group projects carried out both during my bachelor's and master's degrees and by being in a team of educators in several summer experiences (known as GRESt and summer camps).

- Leadership skill matured by being the manager of a group of educators (around 80 people) during some summer experiences.

- Problem-Solving skills gained through the numerous projects related to the university and high school courses and also through several competitions (artificial intelligence hackaton, OII – Olimpiadi Italiane di Informatica).

- Motivation, ambitiousness, sense of initiative and autonomy gathered during my bachelor's and master's thesis and in my previous high school experiences.

ADDITIONAL INFORMATION

Awards

- Winner of the 5-th edition of the Artificial Intelligence hackathon organized by UNOX Spa.

- Winner of several scholarships, received because of the outstanding high school performance. The scholarships were provided by IIS Einaudi-Scarpa high school (in 2017, 2018, 2019) and by the municipality of Trevignano (in 2015, 2016, 2017, 2018, 2019).

- Winner of scholarship "mille e una lode" in 2020, 2021, 2022.

Other

- participated at OII (Olimpiadi Italiane di Informatica), programming competition, at regional level (2016,2017,2018).

- participated at OII (Olimpiadi Italiane di Informatica), programming competition, at national level (2018).

- participated at "Giochi regionali della chimica", chemistry competition at regional level (2016)

**ACCEPTED
PUBLICATIONS**

**International
Journals**

S. Tomasin and S. Merlo, "Two-Way Protocol for Downlink Channel State Information Reporting in FDD Networks," in IEEE Transactions on Vehicular Technology, doi: 10.1109/TVT.2024.3510154.

**International
Conferences**

Carlesso, D., Gobbo, R., Merlo, S., Pomaro, A., Spinosa, D., & Ferro, N. (2023). SEUPD@ CLEF: Team DARDS-IR System for Short and Long Term Retrieval. In CEUR WORKSHOP PROCEEDINGS (Vol. 3497, pp. 2338-2367). CEUR-WS. ISSN: 1613-0073

Other

**SUBMITTED
PUBLICATIONS**

**International
Journals**

**International
Conferences**

Other