Sonia Nicoletti

Bologna, Italy | sonia.nicoletti@studio.unibo.it | +39 3888155351 | sonianicoletti.github.io

EDUCATION

University of Bologna

Master's Degree in Computer Science

National Taiwan University
Study Abroad Program

• **Drexel University**Study Abroad Program

Philadelphia, USA
Sep 2022 – Dec 2022

University of Bologna

Bachelor's Degree in Computer Science for Management

• Final Grade: 110/110 cum laude (First Class Honours)

• Thesis: "Emerging business models in Web 3.0"

SELECTED PROJECTS

LLMs and Essence: Chatbot Development for Software Engineering Education

Present

Bologna, Italy Sep 2022 – Present

Taipei, Taiwan

Bologna, Italy

Sep 2019 – Jul 2022

Aug 2023 – Dec 2023

Master thesis

- Developed an LLM-powered chatbot using a RAG system to provide tailored answers about the Essence standard.
- Performed several tests to evaluate the quality of the responses by adjusting various system components.

Exploring Public Discourse on AI Risks

Jan 2024

Social Media & Social Network Analysis individual project

- Collected and analysed YouTube comments from AI-related videos published between 2020 and 2023.
- Applied sentiment analysis, topic modelling, and dictionary-based text analysis to assess public opinions on AI risks.

Customer segmentation analysis for AI-Driven Healthcare Applications

Jul 2024

Business Intelligence group project

- Collected survey responses on the use of a hypothetical medical chatbot designed to offer health advice.
- Utilized PCA and hierarchical clustering techniques to form clusters that reveal varying expectations and needs within the consumer base.

More academic projects can be found on my website: sonianicoletti.github.io

WORKING EXPERIENCE

Full-stack web developer intern

Bologna, Italy

Jan 2022 – Feb 2022

- Improved the database structure (ER model) of the web application resulting in faster queries of user tables.
- Developed a new JavaScript front-end feature in the web app (generating food labels based on database entries).
- Conducted analysis of requirements and designed pages of a new mobile app based on existing features of the company's web app using **Figma**.

Agenda Digitale dell'Emilia-Romagna

Digital Tutor

Cooki srl

Bologna, Italy Dec 2016 – Feb 2017

- Tutored participants of the digitization project "Pane e Internet" which included minorities at risk of being digitally excluded, increasing their digital literacy.
- Encouraged the development of technical skills, assisted and guided participants through the course.

HONORS AND AWARDS

The Cornell, Maryland, Max Planck Pre-doctoral Research School

2023

Program attendee

 Selected as one of the ~90 students to attend the Cornell, Maryland, Max Planck Pre-doctoral Research Summer School.

UNIBO Study Award for Computer Science

2023

Scholarship recipient

 Selected as the best student in the Computer Science master's program for 2023, based on grades.

Coop Reno Scholarship 2019-2023

Scholarship recipient

• Selected as one of the best students among the Coop Reno cooperative.

SKILLS

Front-end: HTML/CSS, JavaScript (Vue, Express), Kotlin (Android)

Back-end: Java, C++ (OpenGL), SQL (MySQL, Postgres), Firebase, MongoDB, PHP

Data science and AI/ML: Python (PyTorch), R, WEKA, Gephi

Developer Tools: Git, JUnit, Figma, Balsamiq, Jira, Agile Methodology (Scrum)

Languages: Italian (native), English (C1), French (C1), Chinese (A2).