## Sonia Nicoletti

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

#### **EDUCATION**

University of Bologna

Master's Degree in Computer Science

Sep 2022 – Present

Bologna, Italy

National Taiwan University

Study Abroad Program

Taipei, Taiwan Aug 2023 – Dec 2023

Drexel University

Study Abroad Program

Philadelphia, USA Sep 2022 – Dec 2022

**University of Bologna** 

Bachelor's Degree in Computer Science for Management

Bologna, Italy Sep 2019 – Jul 2022

• 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

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

- Utilized YouTube API to collected comments from AI-related videos published between 2020 and 2023.
- Applied sentiment analysis using BERT, 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**

**Cooki srl**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

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

 Awarded 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 a top student 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).