# Sonia Nicoletti

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

## EDUCATION

**University of Bologna**                                                                                             Bologna, Italy
*Master's Degree in Computer Science*                                                                  Sep 2022 – Present

- **National Taiwan University**                                                                            Taipei, Taiwan
  *Study Abroad Program*                                                                                      Aug 2023 – Dec 2023

- **Drexel University**                                                                                        Philadelphia, USA
  *Study Abroad Program*                                                                                       Sep 2022 – Dec 2022

**University of Bologna**                                                                                             Bologna, Italy
*Bachelor's Degree in Computer Science for Management*                                     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**                                                                                                         Bologna, Italy
*Full-stack web developer intern*                                                                          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**                                                                     Bologna, Italy
*Digital Tutor*                                                                                                       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).