

ENRICO BENEDETTI

@ enrico.benedetti5@studio.unibo.it

enricobenedetti.github.io

enribene

EnricoBenedetti

WORK EXPERIENCE

National Institute of Informatics

Research intern – NII International Internship Program

Sept 2023 – Feb 2024 Tokyo, Japan

- Proposed and worked on a project investigating how to improve the quality of example sentences for language learners using LLMs.
- Participated in the lab's weekly activities, such as seminars and reading groups with other researchers, and gave presentations.
- Wrote a paper for a scientific conference (under review) and prepared my Master's thesis.

EDUCATION

University of Bologna

M.Sc. in Artificial Intelligence

Sept 2021 – Mar 2024 Bologna, Italy

Thesis: "Example Sentence Suggestion for Learners of Japanese as a Second Language Using Pre-Trained Language Models"

CGPA: 28.8/30.

Final grade: 110/110 with honors

University of Bologna

B.Sc. in Computer Engineering

Sept 2018 – Oct 2021 Bologna, Italy

Thesis: "Cryptographic CTF challenges: theory and techniques"

Final grade: 107/110

PROJECTS

GarfieldRetrieve: a Deep Metric Learning approach for Retrieving comic strips

Feb 2023 EnricoBenedetti/GarfieldRetrieve

- Curated a dataset of Garfield transcribed comic strips, to perform semantic retrieval.
- Built a retrieval system with Deep Metric Learning and Sentence Transformers, comparing it with other methods.

NLP pandas pytorch Transformers

AICamp – Text-to-Image

June 2023 EnricoBenedetti/AICAMP-text2image

- Research survey for the "MAI4CAREU" project in collaboration with the University of Cyprus.
- Presented and discussed the main sota approaches for the Text-to-Image task, GANs and Diffusion models.

Human Value Detection with a Hierarchical Deep Learning approach

Feb 2023 EnricoBenedetti/HumanValueDetection

- Team project in NLP on SemEval 2023 Task 4. ValueEval: Identification of Human Values behind Arguments.

NLP Python keras TF LaTeX Transformers

Part-of-speech Tagging with RNNs

Nov 2022 EnricoBenedetti/pos-tagging

- As a team, we implemented POS tagging using different architectures based on Recurrent Neural Networks.
- We wrote a paper-style report containing detailed analysis of results and performance.

NLP ML Python pytorch

1D Barcode Quality Verification

Sept 2022 EnricoBenedetti/1DBarcodeQualityVerifier

- Project for the Image Processing & Computer vision course. A Jupyter notebook and Python script for barcode localization and quality assessment.
- It can produce an analysis according to the IEEE guidelines for barcode quality for multiple images at once.

CV Python OpenCV pandas

Capacitated Vehicle Routing Problem

Aug 2022 EnricoBenedetti/CVRP

- Team project for the Combinatorial Optimization course.
- Implemented and documented solving strategies and models for CVRP using Constraint Programming, boolean SAT solving, SAT Modulo Theories and Mixed Integer Programming frameworks.

Minizinc Python z3 MIP SAT CP

SKILLS

Languages

Italian (Native), English (Fluent), Japanese (Beginner)

Programming Languages

Python LaTeX Java C C# JavaScript
HTML+CSS Bash SQL Prolog C++ LISP
Scheme MiniZinc

Frameworks, Engines, Libraries, etc.

Tensorflow

pytorch

pandas

huggingface

spaCy

OpenCV

Unity

z3

Development Tools and Environments

Git

UNIX/Linux

Visual Studio

GIMP

DaVinci Resolve

INTERESTS

I want to learn interesting things and meet people I can look up to. That way, I hope to be able to help others as well. Other than that, my biggest passions are gaming and reading. I like visual arts (especially animation), music, physical training and internet humor.