

ENRICO BENEDETTI

@ enrico.benedetti5@studio.unibo.it

enricobenedetti.github.io

enribene

EnricoBenedetti

WORK EXPERIENCE

National Institute of Informatics

Research intern – NII International Internship Program

📅 Sep 2023 – Feb 2024 📍 Tokyo, Japan

- I proposed and worked on a project studying how to improve the quality of example sentences for language learners, communicating with other researchers.
- I worked with many types of Language Models.
- I wrote a long paper (currently under peer review) and prepared my Master's thesis.

EDUCATION

University of Bologna

M.Sc. in Artificial Intelligence

📅 Sep 2021 – March 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

📅 Sep 2018 – Dec 2021 📍 Bologna, Italy

Thesis: "Cryptographic CTF challenges: theory and techniques"

Final grade: 107/110

PROJECTS

AICamp Cyprus – Text-to-Image

📅 Jun 2023 🔄 EnricoBenedetti/AICAMP-text2image

- Research survey for the "MAI4CAREU" project, where we presented and discussed an overview of the main sota approaches for the Text-to-Image task (at the time).

NLP

CV

Midjourney

LaTeX

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 based on Deep Metric Learning using Sentence Transformers, comparing it to Latent Semantic Indexing.

NLP

Python

pandas

pytorch

Transformers

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.
- We 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

HUMAN LANGUAGES

Native Italian

Fluent English, Beginner Japanese

SKILLS

Some things I have worked with directly.

Ordered by approximate proficiency/relevance.

Programming Languages

Python

Java

LaTeX

JavaScript

C

C#

Bash

HTML+CSS

C++

SQL

Prolog

LISP

Scheme

MiniZinc

Frameworks, Engines, Libs, etc.

NumPy

Tensorflow

pytorch

pandas

huggingface

spaCy

OpenCV

Unity

.NET

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.