ENRICO BENEDETTI

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enricobenedetti.github.io

in enribene

Python

NLP

C EnricoBenedetti

pytorch

Transformers

WORK EXPERIENCE

National Institute of Informatics

Research intern - NII International Internship Program

- **Sep 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 currently under peer review and prepared my Master's thesis.

EDUCATION

University of Bologna

M.Sc. in Artificial Intelligence

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 - Oct 2021

Bologna, Italy

Thesis: "Cryptographic CTF challenges: theory and

techniques"

Final grade: 107/110

PROJECTS

AlCamp Cyprus - Text-to-Image

- Jun 2023 C 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

PLEX

GarfieldRetrieve: a Deep Metric Learning approach for Retrieving comic strips

- Feb 2023 C 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, evaluating its quality against other techniques.

Human Value Detection with a Hierarchical Deep Learning approach

pandas

- Feb 2023 C EnricoBenedetti/HumanValueDetection
- Team project in NLP on SemEval 2023 Task 4. ValueEval: Identification of Human Values behind Arguments.



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.



1D Barcode Quality Verification

- 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

- 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

HUMAN LANGUAGES

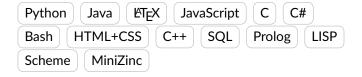
Native Italian Fluent English, Beginner Japanese

SKILLS

Some things I have worked with directly.

Ordered by approximate proficiency/relevance.

Programming Languages



Frameworks, Engines, Libs, etc.

NumPy Tensorflow Unity .NET z3 pytorch pandas huggingface spaCy OpenCV **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.