DOMIZIANA CATALANO

AI Research Fellow

@ domicata4@gmail.com

Rome, Italy

Technology enthusiast, interested in Artificial Intelligence, in particular machine learning and deep learning for computer vision.

EXPERIENCES

Al Research Fellow

Leonardo

🛗 Jan 2021 - now

♀ Genoa, Italy

Research Fellow in Leonardo applied AI research lab with a focus on computer vision (text detection and scene text recognition) exploiting the computational power of davinci-1 HPC. I have also worked on a NLP project about domainspecific Semantic Text Similarity and Named Entity Recognition. I had the chance to participate to workshops and writing proposals for European calls.

IT Consultant

Indra

May 2018 - Sep 2018

Rome, Italy

Consultant developing TIBCO solutions in BNL BNP Paribas headquarters in Rome.

EDUCATION

MSc in Artificial Intelligence and Robotics Sapienza Università di Roma

₩ Sep 2018 - Oct 2020

Rome, Italy

Thesis on computer vision: Deep Learning methods for deepfake video detection.

TIBCO and CRM Training Course

Indra Academy

Mar 2018 - Apr 2018

Rome, Italy

Bachelor's Degree in Computer Science and Automatic Engineering

Sapienza Università di Roma

₩ Sep 2014 - May 2018

Rome, Italy

PROGRAMMING SKILLS

Python, Keras

Java, HTML, Javascript, Pytorch Lightning, Git C, Pandas, Tensorflow, Matlab, TIBCO



TECHNICAL SKILLS

Machine Learning

Deep Learning

Computer Vision

Generative Models

Scene Text Recognition

Text detection

Natural Language Processing

Internet of Things

Human Robot Interaction

Planning

PROJECTS

TripPlanner

• Android app that helps you find and manage flights. You can choose fixed days or a window of time and it will find the cheapest price combination. You can buy tickets, save flights and check the weather at the destination.

Word Sense Disambiguation System

• Keras implementation of a WSD system to assign the correct sense to a word in a sentence.

Clever Weather

• IoT system where a RIOT-OS app collects data from sensors and sends them to an Azure IoT Hub using MQTT-SN and MQTT protocol.

User Activity Recognition

• Azure webapp that uses the accelerometer to identify the user activity and sends data to Azure IoT Hub.

Talking Chalks

• IoT system that can be used in a museum. It can help visitors during the tour providing information about the museum and the artworks. A smartband with the most suitable profile will be provided to each visitor, so that can everyone can have a customized experience.

Customer service in cinema with Pepper

• Pepper robot can help customers providing info and helping them reserving seats. It can also collect film reviews and entertain people.

DeepFake detector

• Design and implementation of two methods that detect deepfake videos using state-of-the-art deep learning techniques.

Scene Text Recognition

• Creation of an AI system to detect text regions in in-the-wild images and to perform text super resolution to improve text recognition.

LANGUAGES

Italian (native)

English (proficient)

SOFT SKILLS

Strategic thinking

Teamwork

Research

INTERESTS

Reading

Music

Exhibitions

Gym