Alessandro Quarta | Data Scientist

Experience Address:	Phone:	E-mail:
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DLVSystem

Data Scientist

Implementation of a computer vision model to detect objects for quality compliance check, achieving 95.4% of mAP and 93.5% of mAR. Deploy the model in a production environment.

Predict the infection rate probability, in a retrospective study involved 600 patients of Policlinico di Bari, with machine learning algorithms achieving an overall accuracy of 94%, 93% of f1-score for patients without infections and 94% of f1-score for patients with infections. Predict the region of a possible water leakage, in a small district of Catanzaro city, with machine learning achieving 64% accuracy. Forecast the trend of earthquake sensor with neural networks achieving (normalized) MAE of 0.48.

Technologies: Python, Tensorflow, Keras, Pytorch, Scikit-learn, Pandas, Seaborn, Networkx, Docker, Tensorflow Serving.

Fondazione IRCCS Istituto Nazionale dei Tumori di Milano

Data Science intern

May 2022 - Currently Develop a pipeline to extract radiomics features from CT images of 184 patients and combine with clinical features. Use machine learning algorithms to evaluate the efficiency of immune therapy for oncological patients achieving an accuracy of 73% on Disease Control Rate outcome. Technologies: Python, Pyradiomics, Pytorch, Pandas.

Università della Calabria

Research fellow

Research carried out in the Department of Mathematics and Computer Science involves to implementing algorithms of neuro-symbolic artificial intelligence that combine Deep Learning and Deductive Logical Reasoning techniques. The research fellow was funded by the PON MISE MAP4ID project "Multipurpose Analytics platform 4 Industrial Data", whose scientific director is Prof. Nicola Leone. Technologies: Python, Tensorflow, Keras, Answer Set Programming.

Healthy Reply, co. of Reply S.p.A.

ICT Consultant

January 2019 – August 2020 Develop RESTful services for telemedicine application to support the accessibility of information of centralized health services. Implementation of computer vision model to estimate the 2D pose of patient during the telerehabilitation in real time. Technologies: SpringBoot, PostgreSQL, Python, Flask, Tensorflow.

Molinette's Hospital

Intern

During bachelor's degree I did an internship as clinical engineer at Molinette's Hospital in Turin.

Education

Sapienza Universita di Roma

National PhD in Artificial Intelligence October 2021 - Currently The Italian National PhD Program in Artificial Intelligence (https://www.phd-ai.it) is made of 5 federated PhD courses that bring together 61 universities and research institutions.

Università degli Studi di Torino

Master of Science in Artificial Intelligence – 107/110 Thesis: 2D Human Pose estimation with deep neural network for movement analysis in tele-rehabilitation context. Supervisors: Prof. Davide Cavagnino, Eng. Saverio Losito. Technologies: Python, Flask, Tensorflow.

Politecnico di Torino

Master of Engineering in Biomedical Engineering – 110/110 cum laude April 2016 – October 2018 Thesis: 3D reconstruction of the centerline in angiographic images and evaluation of hemodynamic parameters in patient-specific geometry. Supervisors: Prof. Filippo Molinari, Prof. Diego Gallo and Eng. Nicola Michielli. Technologies: Matlab, VMTK, SimVascular, ParaView.

Politecnico di Torino Bachelor of Engineering in Biomedical Engineering – 105/110

Liceo Scientifico Statale Pitagora di Rende

High school diploma – 100/100

Volunteering

Plastic Free Onlus

Involve 150+ people in several plastic collection events. Raise awareness about plastic overconsumption AVIS: Associazione Volontari Italiani del Sangue

remote October 2020 - Currently

Cosenza, Italy

November 2020 – October 2021

March 2015 – July 2015

Rome, Italy

Turin, Italy January 2019 – December 2020

Turin, Italy

Turin, Italy September 2012 – March 2016

Cosenza, Italy September 2007 – June 2012

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remote

Turin, Italy

Turin, Italy