Valerio Cristofori

Doctor of computer engineering

Site GitHub LinkedIn

About me

Hi, I am Valerio Cristofori I was born in Rome on 12^{th} August 1998. I have always been passionate about the IT sector and engineering.
I am therefore very determined to make a career in these sectors, driven by the desire to know and to improve. In particular, I am now interested in the world of **AI**, **Big Data analysis** and **Cloud Computing**.

Work

PWC - CUSTOMER TRANSFORMATION
November 2022 | Roma

Education

MASTER'S DEGREE IN COMPUTER ENGINEERING | Data Science and Engineering
November 2020 - Juny 2023 | University of Tor Vergata, Roma
Mark: 110/110

BACHELOR'S DEGREE IN COMPUTER ENGINEERING
September 2017 - October 2020 | University of Tor Vergata, Roma
Mark: 110/110

SCIENTIFIC LYCEUM DIPLOMA
September 2012 - August 2017 | L. Edoardo Amaldi, Roma

Projects

PERSISTENT KEY-VALUE STORAGE | Go
2021, GitHub repository

- The aim of the project is to create a distributed storage system for edge computing. The application was conceived as a persistent, replicated and key-value storage service, provided by edge nodes that communicate with each other. The values are the result of the temperatures measured by a set of sensors. Clients can interact with edge nodes through 4 RPC calls.

PARALLEL PRODUCT SPARSE MATRIX PER VECTOR: SMPV | C, CUDA
2021, GitHub repository

- The goal is to create a parallel computing core by differentiating 2 types of parallelization. The first is based on an implementation of the multithreading concept on shared memory systems: OpenMP. The second is CUDA, which is an API that allows the use of GPU for parallel computing (general-purpose computing on GPU).

LENDING CLUB DATA CREDIT RISK ANALYSIS - PREDICTION OF DEFAULTS | Python
2022, GitHub repository

- Lending Club is the largest online loan market. The purpose of the analysis is to use machine learning models to model credit risk as a binary classification problem. Loan credit loss is the amount of money lost by the lender when the borrower refuses to pay.

STOCKS TIME SERIES ANALYSIS: CRUDE OIL AND AMAZON | R
2022

- The target of the analysis is to study the characteristics of the series, perform transformations for a more accurate analysis and, finally, use historical data to predict future prices of stocks, using model as ARIMA, Ornstein–Uhlenbeck.

ANALYSIS OF THE DATASET OF ANTI COVID-19 VACCINATIONS | Java
2021, GitHub repository

- Analysis of the dataset of anti Covid-19 vaccinations with Spark: calculate the average number of vaccinations that has been carried out daily in a generic vaccination centerin that region and during that month; determine the top-5 regions for which the highest number of vaccinations; considering all the categories and, using a clustering algorithm, classify the areas into Kclusters considering for each area the estimate of the percentage of vaccinated population.

IT Skills

PROGRAMMING

Proficient:
Python • Java • C • SQL • R

Experienced:
LaTeX • Go • Shell • C++

Familiar:
Assembly

LIBRARIES/FRAMEWORKS

Tensor flow • Scikit-learn • Spark • Flink • MapReduce • CUDA • MPI/OpenMP • Python libs • Weka

TOOLS/PLATFORMS

Office • Git • AWS • VirtualBox • Kubernetes • Terraform • Docker • DockerCompose • Travis • Sonar Cloud • Jupyter

EXTRA

Good foundation on:
OS • Cybersecurity • Software engineering

Soft Skills

Independence • Determination to achieve goals •
Desire to learn and grow •
Self-confidence • Enterprising •
Problem solving • Leadership •
Teamwork • Adaptability • Ability to plan and organize • Resistance to stress

Languages

Native:
Italian

Independent:
English

Base:
Spanish

Interests

HOBBY

Gym • Swimming • Gaming • Coding • Cooking • Linux passion • Riding motorbike