# Vincenzo Lavorini

## SENIOR DATA SCIENTIST





Webpage: https://vlavorini.github.io/

#### CONTACT

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Nationality Italian

Date of birth December 2, 1981

**Gender Male** 

#### **EXPERIENCES**

**Data Scientist** 

Oct 2017 - Present Research and analyze company data, working with marketing, business and product teams by fetching and analyzing relevant datasets.

@ Natural Cycles -Geneva (CH)

Supervision of three junior Data Scientists.

Main outcomes:

- Deployment of optimization algorithms based on Bayesian methods:
- Development and deployment of churning prediction algorithms combining several Machine Learning techniques: Boosted Classification Trees (XGBoost), non-linear Dimensionality reduction (UMAP) and soft clustering (HDBScan)
- Development of time dependent data extraction model based on dilated CNN

08/2016 - 09/2017 Consultant in the Artificial Intelligence / Machine learning sector: PoC development, teams selections.

**Data Scientist** 

Main outcomes:

@ (self employed) -

Geneva (CH) Development of Deep Learning models with TensorFlow and Keras:

- computer vision: object classification, detection and counting (CNN), image improvement (SuperResolution)
- classification models based on representation of objects with semantic correlation in multi dimensional space and analysis (entity embeddings, RNN)

01/2016 - 07/2016 Designed and development of a web application for OA/QC purposes.

FS developer/Data Scientists

Based on Node.js as core framework, with Angular.js as frontend, the application includes Data Analysis routines:

@ CERN - Geneva (CH)

- QA of hardware components via Computer Vision method (OpenCV / Python);
- Automatic Report creator;

07/2014 - 01/2016 Study and development of monitoring tools for data management Data Scientist purposes, with web pages as GUI.

@ CERN - Geneva (CH)

12/2013 - 06/2014 I've been part of the team which set up a Data Center for the ReCaS project (22k cores, 14 PB storage). **Data Scientist** 

@ INFN - Cosenza (IT)

#### Main outcomes:

- Study and development of users classification, based on their resources usage.
- Study of resources pre-allocations based on the classification outcome.

02/2013 - 06/2013 R&D on a sub-nuclear particle detector.

Physicist Main outcome: Development of a model to simulate the behavior of the detector.

@ CERN - Geneva (CH)

### CONTINUOUS EDUCATION

09/2018 Higher Bayesian methods for Machine Learning

Economics Coursera License CZ5XFYEMFS3V School of

10/2017 Structuring Machine Learning Projects

Stanford Coursera License 6FFH8XNI54R9

University

09/2017 Managing Project Risks and Changes

Univ. Of Irvine Coursera License BAMQ8PW5BZG6

09/2017 Budgeting and Scheduling Projects

Univ. Of Irvine Coursera License XDHF2L85WYEG

09/2017 Initiating and Planning Projects

Univ. Of Irvine Coursera License FVJ98WDB6VR7

06/2017 Business Concept

CTI-EPFL

08/2016 Machine Learning

Stanford Coursera License DJUC43DU9NLH

University

#### FORMAL EDUCATION

2009 - 2012 Ph. D. In High Energy Physics

Universita degli studi Thesis title: Study of the top quark differential cross section with della Calabria (Italy) the ATLAS detector at the LHC

2006 - 2009 Master's degree In High Energy Physics

Universita degli studi Thesis title: Study of the top quark production with the ATLAS della Calabria (Italy) detector at the LHC

2006 - 2009 Bachelor degree Physics

Universita degli studi Thesis title: Decay time of mu lepton in free and 1s bound states della Calabria (Italy) of aluminum

#### **LANGUAGES**

Mother tongue Italian

Foreign languages English: c1

French: c2

#### IT PROFESSIONAL SKILLS

Operating systems Linux, Mac OS X

System development Python, Java, Javascript (NodeJS), Bash, C++

Data Science/ML Scikit-Learn, Pandas, Numpy, Pytorch

Visualization tools Matplotlib, Seaborn, Bokeh, Tableau

Collaboration Tools Git, SVN, Google Docs, Slack, Jira, Trello

#### PROFESSIONAL HIGHLIGHTS

#### OTHER SKILLS AND HOBBIES

I like to go beyond the expectations, in order to reach goals at the best;

Writer on the online review "Towards Data Science" -

https://medium.com/@vincenzo.lavorini;

Entrepreneurial mindset;

I keep myself updated for new tools and techniques, also by taking on-line courses;

Winner of a bronze medal in an international Deep Learning competition: "The Nature Conservancy Fisheries Monitoring" hosted by Kaggle.com

I love to take initiatives;

I get actively involved in open source projects;

I have a deep knowledge of Linux O.S. networking and Cloud Computing

To whom who concerns, Kantar Group, Casalecchio di Reno (BO - Italy)

Dear HR,

I built my professional background in an institution at the highest levels in big data technologies, the CERN. Work in such multi cultural and passionate environment, filled with the brightest brains I ever knew, founded my mindset: leverage on my passion to fulfill duties in the most efficient way.

My professional history makes me a strong contender for this position.

The mindset I have allows me to find the best way to lead a project to the best possible outcome given the resources available, in a clear and predictable way.

The experiences I acquired go from the extraction and processing of raw data from multiple and heterogeneous sources to the design and deployment of Data models using the latest Machine Learning techniques, passing by more traditional quantitative analysis.

All this made me the authority for any Artificial Intelligence related projects in the company where I actually work.

That's why I believe I am a good candidate for the position of Senior Data Scientist, and a strong asset for the Kantar Group.

Sincerely,

Dr. Vincenzo Lavorini