# Vincenzo Lavorini **DATA SCIENTIST**











## CONTACT

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Nationality Italian

Date of birth December 2, 1981

**Gender Male** 

### **EXPERIENCES**

@ Natural Cycles

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

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.

Data Scientist Main outcomes:

@ (self employed) 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)

FS developer/Data purposes.

01/2016 - 07/2016 Designed and development of a web application for QA/QC

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

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

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

@ INFN

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 @ CERN the detector.

## CONTINUOUS EDUCATION

09/2018 Russian's Bayesian methods for Machine Learning

HSE Coursera License CZ5XFYEMFS3V

10/2017 Structuring Machine Learning Projects

Stanford Coursera License 6FFH8XNJ54R9

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 guark 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 Writer on the online review "Towards Data reach goals at the best;

Science";

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