# Vincenzo Lavorini **DATA SCIENTIST**







Webpage: <a href="https://vlavorini.github.io/">https://vlavorini.github.io/</a>



# CONTACT

Address 247 Ch. Pre de Planche

01280 Prevessin-Moens

France

Telephone 2 +33 633 799 662

Email vincenzo.lavorini@protonmail.ch

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) - supervisor of two junior Data Scientists

08/2016 - 09/2017 Development of Deep Learning models with TensorFlow and Keras:

**Data Scientist** @ (self employed)

- 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 - 06/2016 Study and development monitoring tools for data management Data Scientist purposes, with web pages as GUI.

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

@ INFN

@ CERN

#### 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 FVI98WDB6VR7

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

I like to go beyond the expectations, in order to Writer on the online review "Towards Data reach goals at the best;

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

I love to take initiatives;

I get actively involved in open source projects for code and bugs solving;

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

### OTHER SKILLS AND HOBBIES

Science";

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