

# Vincenzo Lavorini

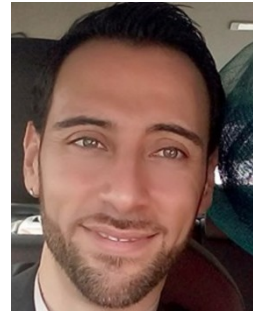
## DATA SCIENTIST

 <https://www.linkedin.com/in/vincenzo-lavorini-05224ab0/>

 <https://github.com/vlavorini>

 <https://medium.com/@vincenzo.lavorini>

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



### CONTACT

**Address** 247 Ch. Pre de Planche  
01280 Preveessin-Moens  
France

**Telephone**  +33 633 799 662

**Email**  vincenzo.lavorini@protonmail.ch

**Nationality** Italian

**Date of birth** December 2, 1981

**Gender** Male

### EXPERIENCES

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

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
- Development of time dependent data extraction model based on dilated CNN

**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)

**01/2016 - 07/2016** Designed and development of a web application for QA/QC purposes.  
**FS developer/Data Scientists**  
**@ CERN** Based on Node.js as core framework, with Angular.js as frontend, the 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 purposes, with web pages as GUI.  
**Data Scientist**  
**@ CERN**

**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**

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**

## **CONTINUOUS EDUCATION**

**09/2018** Russian's **Bayesian methods for Machine Learning**  
**HSE** Coursera License CZ5XFYEMFS3V

**10/2017** **Structuring Machine Learning Projects**  
**Stanford University** Coursera License 6FFH8XNJ54R9

**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 University** Coursera License DJUC43DU9NLH

## FORMAL EDUCATION

**2009 - 2012** *Ph. D. In High Energy Physics*

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

**2006 - 2009** *Master's degree In High Energy Physics*

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

**2006 - 2009** *Bachelor degree Physics*

**Università degli studi della Calabria (Italy)** Thesis title: Decay time of mu lepton in free and 1s bound states 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 reach goals at the best;

Entrepreneurial mindset;

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

Writer on the online review "Towards Data Science";

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