# Claudio Scalzo

#### DATA SCIENCE AND SOFTWARE ENGINEERING STUDENT

□ (+39) 346 24 55 116 • 🗷 claudio.scalzo@outlook.com • 🗘 github.com/claudioscalzo • 🛅 linkedin.com/in/claudioscalzo

Born in Italy in 1994. Passionate about data science and software development. Strong analytical thinking and team-working skills. Successful academic results due to the passion for these topics and the high precision in on-time fulfillment of projects, tasks and assignments.



#### **Education**

#### Master's Degree in Data Science and Engineering

**EURECOM / TELECOM PARISTECH** 

• Double Degree programme between Telecom ParisTech and Politecnico di Torino

Master's Degree in Software Engineering

POLITECNICO DI TORINO

Bachelor's Degree in Software Engineering

POLITECNICO DI TORINO

• with the highest grade, 110/110

Sophia Antipolis, France

Sep. 2017 - Mar. 2019

Turin, Italy

Sep. 2016 - Mar. 2019

Turin, Italy

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Sep. 2013 - Jul. 2016

Jul. 2018 - Dec. 2018

## **Experience**

SAP France Paris, France

DATA SCIENTIST / SOFTWARE ENGINEER INTERN

- Provisioned...
- Built...
- · Implemented...

## **Projects**

#### Team leader for an optimization project for TIM / SWARM Joint Open Lab

GITHUB.COM/CLAUDIOSCALZO/COIOTE-OMA-PROJECT

- Solving of a VRP (Vehicle Routing Problem) optimization problem proposed by TIM and the SWARM Joint Open Lab, for an IOT project named ColoTe. Multistart tabu-search approach, written in Java (with the OpenTS Java library).
- Achieved first position in the final ranking. Secured great comprehension of metaheuristics and, overall, improved logical/algorithmic competences and team-working skills.

#### Virtual Assistant for answering music related questions

GITHUB.COM/D2KLAB/MUSIC-CHATBOT

- Developing of a virtual assistant (in the chatbot and vocal assistant forms), capable of answering music related questions and providing detailed graphical results. Informations extracted from the DOREMUS knowledge base, queried using the SPARQL language.
- Built using *Node.js* code with the *BotKit* framework. Used and trained Google's *Dialogflow* as NLP. Interfaced with the *Facebook Messenger*, *Slack* and *Google Assistant* clients, using the respective APIs.
- Did two pull requests (accepted and merged) to the botkit-middleware-dialogflow author, introducing concurrency and language support in the middleware.

#### House prices Kaggle challenge: predicting sales prices with advanced regression techniques

GITHUB.COM/LOMLUCA/AML

- Solution of one of the most famous Kaggle challenges, developed during the AML (Algorithmic Machine Learning) course at EURECOM.
- Top grade on the course ranking, thanks to smart preprocessing techniques (like PCA and DBSCAN for outlier removal), and stacked models.
- Written in Python, using Pandas DataFrames for the data structures and scikit-learn for the modeling phase.

## Challenge on the Fashion-MNIST and CIFAR-10 datasets: Naive Bayes Classifier and Bayesian Linear Regression GITHUB.COM/CLAUDIOSCALZO/ASI-CHALLENGE

- Solution of the ASI (Advanced Statistical Inference) course. Implemented (from scratch) the Naive Bayes Classifier and the Bayesian Linear Regression. Used in the classification tasks of the Fashion-MNIST and CIFAR-10 images datasets.
- Written in Python using NumPy and Pandas. Achieved extremely satisfying results in terms of accuracy and computational efficiency.

### Skills

**Programming** Python (+ NumPy, Pandas, scikit-learn, Keras, TensorFlow, PySpark, Spark MLlib) • C • Java • SQL

**Big Data** Apache Spark • MapReduce & HDFS • NoSQL Architectures • Data processing (cleansing, analysis)

Machine Learning Deep Learning (NN, CNN, RNN) • Probabilistic Machine Learning (Bayesian Classification, Regression, Mixture Models)

OS & Tools GNU/Linux (+ Bash, AWK, Sed) • Git • Jupyter Notebook • Dialogflow (+BotKit) • MATLAB • LaTeX