Piermattia Schoch

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Experience

- **@Philips, Financial Data Scientist - Internship**
  Oct. 2019 - Mar. 2020
  - **Project**: As a member of the Advanced Reporting & Analytics team, i led a product portfolio optimization project for one Personal Health business. Specifically, i implemented an end-to-end data science project following all the steps of ASUM-DM methodology. The final output consisted in recommending which SKUs could have been removed to increase the overall margin of the category, based on real market and web collected data.
  - **Tech skills**: SQL - R - Python - Web scraping (scrapy/scrapy-splash) - Git
  - **Soft skills**: Business sense - Perseverance - Effective communication - Professional PowerPoint presentation

Education

- **Athens University of Economic and Business** — Athens, Greece
  Master of Science in Business Analytics; Erasmus+ Programme — *Jan. 2019 – Jul. 2019*
- **Catholic University of the Sacred Heart** — Milan, Italy
  Master of Science in Data Analytics; Final Grade: 110L/110 — *Sep. 2017 – Apr. 2020*
- **Alma Mater Studiorum - University of Bologna** — Rimini, Italy
  Bachelor in Finance, Insurance and Business; Final Grade: 108/110 — *Sep. 2013 – Dec. 2016*

Relevant Coursework

- **Graduate**: Data Management - Big Data Systems - Mathematical Methods - Computational Statistics - Statistical Learning and Machine Learning - Bayesian Methods - Deep Learning - Social Network Analysis - Data Visualization - Patents and Property Rights for Big Data
- **Undergraduate**: Probability and Statistics - Statistical Inference - Time Series - Credit Scoring - Survival Analysis - Statistical Methods for Financial Markets - Market Analysis

Technical Skills

- **Languages:**
  1-1.5 Year Experience
  - **R**: Rvest - Tidyverse - Jsonlite - FactoMineR - Gbm - Caret - Igraph - Ggplot2 - HighCharter - Shiny - Knitr
  - **Python**: Scrapy - Bs4 - Pandas - Numpy - Scikit-Learn - Mlib - Keras - TensorFlow - Matplotlib - Plotly
- **Technologies:**
  0.5 Year Experience
  - **Big Data Ecosystem**: MySQL, Redis, MongoDB, Hadoop, Cloudera Quickstart (Hive), Spark
  - **Business Intelligence**: QlickSense
  - **Other**: SaS Enterprise Miner, Google Cloud Platform

Some projects

- **Churn Analysis**: This project aims to exploit the problem of churn of customers from a telecommunications company. The first task was to perform an inferential analysis, in order to understand which variables were most related to churn. Then the focus has been placed on prediction accuracy, with an in depth analysis on the variability of the results. Finally, i performed a cluster analysis for the Marketing department
- **False alarms detection methods in earthquake early warning systems**: I worked, as a member of a team, in a real-world application where the task was to develop a false alarm detection method for a smartphone-based crowdsourcing network. Traditional statistics and spatial statistic have been used to deal with this problem
- **Analysis of ads from the used motorcycle market**: The dataset consist of 30K classified ads (Json files) from the largest market for used cars and spare parts in Greece. I read, cleaned, added the data to MongoDB, throught R, and then i perfomed queries and analysis in order to understand the market and to identify ads considered as best deals. After that, i helped the client to measure the effectiveness of the email solicitation strategy, by applying Redis Bitmaps to a small dataset of 19.999 users
- **Blog comment prediction using Spark**: Prediction of the number of comments that a blog post receives based on features of the post. I applied ML models available through the Dataframe-based API in *spark.ml* package