DAVIDE BOSSOLI

PERSONAL INFORMATION

Born in Italy, 21 August 1988

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WORK EXPERIENCE

2018 - Now   AXA ITALY

Senior data scientist

I am currently working as senior data scientist at AXA Italy. My main activity is to develop and manage core-business Artificial Intelligence data applications end to end, from the design phase to the development / deployment / monitoring ones. During these projects I also supervise and mentor cross-functional teams of data scientists and machine learning engineers.
Each application is developed and deployed in a private AWS Cloud using for instance services for ETL tasks (Glue, EMR), machine learning (Sagemaker), serverless processing (Lambda) monitoring and exploration (Cloudwatch, Quicksight, Athena) and orchestration (Step). For certain applications we also developed advanced Qlik Sense dashboards for data exploration or service monitoring.
I am also contributing to the development of data science frameworks for MLops, experiments tracking / reproducibility and training/serving data pipelines.
So far I had the opportunity to work mainly on hybrid deterministic / machine learning data applications.

2016 - 2018   MCKINSEY ITALY

AI consultant

I helped developing AI prototypes for different clients, use-cases and industries such as banking, insurance, real estate, chemical, semiconductors and pharma. Some of the projects I worked on were abroad, mainly UK and France.
I had the opportunity to work mainly on machine-learning prototypes.

2013, 2014-2016   KAROLINSKA INSTITUTET, BIOSTATISTICS DEPARTMENT

Visiting researcher

During my two periods at Karolinska Institute I worked on my master and Phd thesis, as well as holding statistical labs/seminars and practice as statistical consultant.

2011 - 2012   MUNICIPALITY OF BOLOGNA

Biostatistician

At the Municipality of Bologna I did an internship where I learned the basics of SAS and worked with epidemiological data from the region of Emilia-Romagna. Most of my work was related to studying the association between respiratory mortality and some pollutants such as ozone, particulate matter and nitrogen dioxite.

EDUCATION

2013 - 2016   University of Padova

Phd in Statistics

In the first year I took advanced theoretical statistical courses. During the other two years I worked on my PhD thesis, mostly at the Biostatistics Department of Karolinska Institutet; one of the algorithms that I developed during my thesis was also published in the journal Biostatistics.
Thesis: *Extensions of marginal quantile regression to the analysis of dependent data*
Link to the thesis

2011-2013   University of Bologna

Master of Statistics

Grade: 110/110 cum laude
This degree focused heavily on statistical methodology and its application within the biomedical field. The main topics covered are parametric and non parametric inference, multilevel and generalized linear models, quantile regression, parametric and semiparametric survival analysis, non-parametric time series analysis.
Thesis: *Logistic Quantile Mixed Models - an application to health condition data*

2008-2011   University of Bologna

Bachelor of Statistics

Grade: 110/110 cum laude
Description: Most of this degree was related to the application of statistical methods for economics and business. Some of the topics covered include structural equation modeling, principal component analysis, parametric time series and econometrics.
Thesis: *Statistical models for the evaluation of competences*

PUBLICATIONS

October 2018   Marginal quantile regression for dependent data with a working odds-ratio matrix

Biostatistics journal

This paper contains part of my PhD work and focused on the extension of quantile regression for dependent data.
Authors: Davide Bossoli, Matteo Bottai
Link to the paper

ADVANCED ANALYTICS USE-CASES AND INDUSTRIES

· **Pricing** (insurance, real-estate)
· **Black-boxes telematics scoring** (insurance)
· **Retention** (insurance)
· **Predictive maintenance** (semiconductors)
· **Customer segmentation** (banking)
· **Process automation** (insurance)
· **Process optimization** (chemicals, pharma, payments)

CLOUD SERVICES AND TECHNOLOGIES

Basic   AWS IAM, AWS Cloudwatch, AWS Quicksight, AWS API Gateway, Docker, Terraform

Intermediate   AWS Glue, AWS EMR, AWS Lambda, AWS Dynamodb

Advanced   AWS Sagemaker, AWS Athena

SOFTWARE LANGUAGES AND TOOLS

Basic — STATA, SAS, SPSS, JAVA, LaTeX

Intermediate — R, QLIK SENSE, PYSPARK

Advanced — PYTHON

PYTHON LIBRARIES

PANDAS, NUMPY, MULTIPROCESSING, H2O, SKLEARN, MATPLOTLIB

OTHER INFORMATION

Awards — 2013 · School of Statistics Graduate Scholarship

Languages —
ITALIAN · Mothertongue
ENGLISH · Advanced

Personal interests — Reading books · Watching motor sports · Hiking · Exploring the world

April 21, 2022