Diego Bettega

Data Scientist

Personal Info



150A Rusthall Avenue Chiswick, London, W4 1BS



+44 (0) 7478 992 706



diego.bettega.90@gmail.com



LinkedIn Profile



GitHub Repository

Machine Learning & Al

Python Packages:

- Numpy, Pandas, Matplotlib, Seaborn
- Scikit Learn, Scipy, TensorFlow, Keras

Supervised Learning:

- Regularised Linear & Logistic models
- Naïve Bayes, KNN, Decision Tree, Kernel SVM
- Ensemble techniques: Bagging, Random Forest, Adaboost, XGBoost, Light GBM, Voting Classifier

Unsupervised Learning:

K-means, Hierarchical Clustering

Dimensionality Reduction:

PCA, Kernel PCA, LDA, SOMs, t-SNE, UMAP

Recommendation Systems:

- Market Basket Analysis, Collaborative Filtering
- SVD RRM

Deep Learning:

ANN. CNN. RNN-LSTM. GANs. AutoEncoders

Reinforcement Learning (limited experience):

- UCB, Thompson Sampling
- Markov Decision Process

Software



Languages

English

Italian





Experience

Mar 2018 -Present

Sr Analyst/Data Scientist, Business and Audience Insights

Kinesso (IPG), Data & Tech department - London, UK

- Promoted two times in less than two years.
- Pioneered and build a global model for automatic campaign optimizations, using machine learning models (Python) and deployed in a Web App. Campaign costs were reduced by 30% on average.
- Automated a reporting process by collecting data from multiple Google sources (ADH) using APIs and SQL queries, analysing in Python and visualizing the results in Tableau.
- Successfully designed and implemented an audience insights Tableau dashboard, empowered by first party, third party and programmatic data encoded by using R and alteryx and queried using MySQL. This new product is currently used and sold by EMEA senior leadership team.

Jul 2016 -

Data Analyst

Feb 2018

Adloox - London, UK

- Automated time-consuming manual reporting processes that could easily lead to errors (VBA Excel Macro).
- Solved several business issue using mathematical and analytical techniques.



Education

The University of Texas at Austin #2 in Analytics, #4 in AI, #7 in Machine Learning

Jun 2019 -Jul 2020

PGP in Al and ML (Grade: Excellent)

Advanced statistic; supervised - unsupervised - reinforcement learning; featurization, model selection and tuning; recommendations systems; deep learning (ANN, CNN, RNN - LSTM); NLP; GANs; model deployment.

Winner of a Hackathon with 120 data scientists participating in the competition. The objective was maximizing the accuracy in a supervised classification problem.

#4 place in "The Grand Hackathon" with over 1000 data scientists participating in the competition. Won a prize: course in Mastering Big Data Analytics.

Jul 2020 -Jan 2021

PGP in Cloud Computing

Cloud Foundations; Specialization in AWS, Microsoft Azure and Google Cloud; Containers; Microservices; Big Data Management and Analytics on Cloud; Cloud Security & Migration; Private Cloud; Enterprise Cloud Solutions; Cloud-Native DevOps; On Prem DevOps.

Jul 2020 -Oct 2020

Course in Mastering Big Data Analytics

Apache Hadoop; Map reduce; HDFS; YARN; Hive; Pyspark; Spark SQL; Spark MLIB; Spark

Dec 2014

Mechanical Engineering

streaming; Kafka.

Bachelor's Degree – University of Parma, IT



Projects

- Financial model: ensemble techniques and stateful LSTM on FOREX market prediction.
- NLP: GloVe embedding and multi-layered bidirectional LSTM on sarcasm detection.
- Face Detection: CNN (UNET architecture) to locate the position of a face in an image.
- Face Recognition: pre-trained VGG face, Triplet Loss, PCA and SVM to recognize faces.
- Image Classification: ANN in Numpy & Keras to identify images containing numbers.
- <u>Recommendation System</u>: recommendations for products on an e-commerce website. <u>Customer Retention</u>: stacking multiple ML model to identify churning customers.
- Model Explainability: partial dependence plot and SHAP plot to generate insights.



Certifications

- Machine Learning A-Z[™] and Deep Learning A-Z[™]: (Udemy)
- Machine Learning Crash Course (Google Developers)
- R Programming: Advance Analytics in R for Data Scientist (Udemy)
- The Ultimate MySQL Bootcamp: Go from SQL Beginner to Expert (Udemy)
- Tableau 10 Essential Mastering Calculations Tableau 10 for Data Scientist -Integration Tableau and R for Data Science (all 4 - Lynda)