

PROFESSIONAL EXPERIENCE:

Credit Suisse Zürich, CH
Senior Data Engineer Consultant July 2020 – Present

- Led the development of a new risk escalation & reporting tool for Credit Suisse (UK and US branches). Planned long-term vision, coordinated data acquisition, and built the technological infrastructure
- Led the development of a proprietary graph-analysis application to identify and track the critical dependencies between the data generated by several Credit Suisse departments (EMEA, UK and Swiss branches)
- Designed and implemented a PySpark algorithms working on 10GB of structured batch data ingested daily to identify and escalate potential event driven risks for the Risk management & Compliance department
- Designed and implemented a real-time anomaly detection tool (in Python and Scala) for the Production support team to identify and escalate potential data quality issues

Technologies used: Java (Spring, Hibernate, GraphQL), JavaScript (React, Redux), Python (Pandas, SciPy, Statsmodels), Spark, Hive, Neo4J, Oracle DB, Docker, Kubernetes, Jenkins, Amazon Web Services

Clear Artificial Intelligence Ltd London, UK
Senior Machine Learning Engineer July 2019 – June 2020

- Performed the PPE demand forecasting using statistical methods in Python (MA, ARMA, VAR). The results were used by the NHS Trusts to optimise their supply and decrease costs during the 1st Covid-19 wave in the UK
- Utilized Python to implement a recommender system (based on both collaborative filtering and content-based approaches) for the Nestlé Canada online store, which boosted the total B2B sales by 25%

Technologies used: Python (Pandas, NumPy, SciPy, Statsmodels, PyTorch, NLTK, Matplotlib, Flask), JavaScript (React, Redux, jQuery), Spark, Hive, Neo4J, PostgreSQL, Docker, Google Cloud Platform

HUBX London, UK
Machine Learning Engineer February 2018 – June 2019

- Developed an HTML crawler to download, tag and arrange private companies' information released by the UK Gov. Trained models for text segmentation and keyword extraction
- Utilized Python to implement several machine learning techniques (SVM, Random Forest, XGBoost) for private companies' valuation on 30GB of unstructured data, which reduced the total process time by 18%

Technologies used: Python (Pandas, NumPy, SciPy, Statsmodels, PyTorch, NLTK, Matplotlib, Django), Spark, Neo4J, MongoDB, MySQL, Docker, Amazon Web Services

Exprivia Spa Milan, IT
Data Engineer Consultant February 2016 – January 2018

- Developed several Spark jobs on high performance computing Linux cluster to automate the systemic risk modelling for the Risk management & Compliance department of UniCredit Spa
- Analysed client export datasets by identifying key correlating metrics and conducting time series analysis using R

Technologies used: Python (PySpark, SciPy), Java (Hibernate), Scala, R, Spark, Hive, Kafka, Solr, Cloudera

EDUCATION:

University of the People Online
Master of Business Administration (MBA) June 2019 – September 2020

- Final grade: 3.89/4.0
- Relevant Coursework: Financial management, Managerial accounting, Operations management, Competitive strategy, Managing in the global Economy, Business law, Leadership theory

University of Bari Aldo Moro Bari, IT
Master of science in Computer Science October 2016 – December 2018

- Final grade: 109/110
- Relevant Coursework: Stochastic calculus, Optimisation methods, Time series analysis, Big data analytics, Computational intelligence, Deep learning, Reinforcement learning, Natural language processing, Topics in Artificial Intelligence

University of Bari Aldo Moro Bari, IT
Bachelor of science in Computer Science October 2012 – July 2016

- Final grade: 106/110
- Relevant Coursework: Statistical theory, Linear algebra, Numerical analysis, Software engineering, Object oriented programming in C++, Databases, Machine learning, Project management

SKILLS AND INTERESTS:

- **Programming languages:** Python (Django, Flask), Java (Spring, Hibernate, GraphQL), JavaScript (React, React Native, Redux, jQuery), R, HTML5, CSS3
- **Big data:** Spark, Hadoop, Kafka, Hive, Cassandra, DynamoDB, MongoDB, Neo4J
- **Data science:** Python (Scikit-learn, Statsmodels, Pandas, NumPy, Matplotlib, PyTorch, NLTK), SQL, A/B testing, ETL, Statistics, Time series analysis, Recommender Systems, NLP
- **Cloud technologies:** Amazon Web Services, Google Cloud Platform
- **Certifications:** AWS Certified Solutions Architect, Databricks Certified Associate Developer for Apache Spark 3.0, SAFe Agile Product Manager, Bloomberg Market Concepts (BMC)
- **Languages:** Italian (Native), English (Fluent)
- **Interests:** Cooking, Quantitative Trading

PROJECTS AND LEADERSHIP

BOTS.io January 2022 – Present

Quantitative Trader

- Designed a swing trading strategy based on the SPX and VIX indices convergence and divergence
- Designed and deployed an LSTM network model to forecast the short-term price movements (intraday) of several crypto assets (BTC, ETH and BNB)

Technologies used: Python (Flask, Pandas, NumPy, Statsmodels, PyTorch, yFinance, Matplotlib), Java (Spring, Hibernate), Spark, MySQL, AWS

Google Hash Code February 2019

- Top 10% in the Online Qualification Round