

EXPERIENCE

- **Jobtome** Stabio, Switzerland
Software Engineer 11/2021 - Present

Developed and maintained **search APIs** written in **Python** that query **Elasticsearch**, capable of handling **1000 requests per second**.

Created and managed pipelines using **Apache Beam** for ingesting and processing **millions of records per day**, from **Google Pub/Sub** to **BigQuery**.

Developed a classification model using **NLP** and **deep learning** techniques (**BERT**, **CNN**) and deployed it on **Google Vertex**. The model processes approximately **1 million jobs per day with an accuracy of 95%**.

Created a software architecture in **Python** for a **job offers crawler** consisting of over **500** crawlers for different web pages. Scheduled and executed in production using **Docker**, **Airflow**, and **Kubernetes**, capable of collecting **100k jobs per day**.
- **Polytechnic University of Milan** Milan, Italy
Research Fellow 10/2019 - 10/2021

Monitored **3 millions of Italian conversations around vaccines on social media** (Twitter, Facebook) and understand the interplay between online public discourse and vaccine hesitancy/uptake rates.

Developed a **data pipeline** for ingesting, analyzing and producing insights from **hundreds of online reviews and social media posts per day**, from **100 Italian museums**.
- **Deloitte Digital** Milan, Italy
Software Developer 02/2019 - 08/2019

Developer role on international cloud projects using **Salesforce** technology, which includes several programming languages such as **Java** and **Javascript**.

SKILLS

- **Languages:** Python, Java, Javascript, C++
- **Technologies:** Google Cloud Platform (GCP), Docker, Kubernetes, Git, Airflow, FastAPI, Elasticsearch, Pandas, Numpy, Matplotlib, Scikit-Learn, Tensorflow, Keras.
- **Concepts:** Data engineering, data pipelines, machine learning, NLP, distributed systems, microservices, cloud computing, agile development, test-driven development (TDD), continuous integration/continuous delivery (CI/CD).

EDUCATION

- **Polytechnic University of Milan** Milan, Italy
M.Sc. in Computer Science and Engineering; Final grade: 110 with honors/110 09/2016 - 04/2019
- **Polytechnic University of Milan** Milan, Italy
Bachelor Engineering of Computing Systems 09/2013 - 09/2016

SELECTED PUBLICATIONS

- **ICWSM 2021 - Online:** *A Content-based Approach for the Analysis and Classification of Vaccine-related Stances on Twitter: the Italian Scenario*; Collection and analysis of 3 millions of Italian conversations about COVID-19 vaccines on Twitter, investigating the geographical, temporal and lexical distribution of data. Trained a binary classifier that predicts the stance of tweets towards vaccines. **Link**
- **ICWE 2020 - Helsinki, Finland:** *Generation of Realistic Navigation Paths for Web Site Testing using Recurrent Neural Networks and Generative Adversarial Neural Networks*. Method for generating high-quality weblog data using deep learning techniques, involving comparison of results with a suite of data mining algorithms as a baseline. **Link**