## Silvio Pavanetto

silviopavanetto.com

## EXPERIENCE

Jobtome

Stabio, Switzerland

Email: silvio.pavanetto@gmail.com

Github: github.com/reidemeister94

Nov 2021 - Present

Software Engineer

- Job Categorizer: Classification model developed and deployed on GCP, using NLP deep learning techniques (BERT, CNN), that processes approximately 1 million of jobs per day.
- Job Offers Crawler: Software architecture written in Python, composed by more than 400 crawlers for many different types of web pages, scheduled and executed in production using Docker, Airflow and Kubernetes.

## Polytechnic University of Milan

Milan, Italy

Research Fellow

Oct 2019 - Oct 2021

- **PRIN HOPE**: HOPE High quality Open data Publishing and Enrichment is a PRIN Progetti di Ricerca di Interesse Nazionale project financed by the Minister of Education, University and Research, with objective of discovering and exploiting new ways to connect known sources of data with open data.
- **Periscope**: Map and analyse the unintended impacts of the COVID-19 outbreak by developing solutions and guidance for policymakers and health authorities on how to mitigate the impact of the outbreak.
- Italian Museums Reputations: Data pipeline for ingesting, analyzing and producing insights about online reviews and social media posts of Italian museums.

# Deloitte Digital

Milan, Italy

Software Developer

Feb. 2019 - Aug. 2019

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

### **EDUCATION**

## Polytechnic University of Milan

Milan, Italy

M.Sc. in Computer Science and Engineering; GPA: 3.85 (28.8/30); Final grade: 110L/110

Sep. 2016 - Apr. 2019

### Polytechnic University of Milan

Milan, Italy

Bachelor Engineering of Computing Systems; Final grade: 97/110

Sep. 2013 - Sep. 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, i.e., it applies a "Pro-vax" or "No-vax" label. 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. Main types of algorithms used: Recurrent Neural Networks and Generative Adversarial Neural Networks with a reinforcement learning approach. Link

### Programming Skills

• Languages: Python, Java, Javascript, C++ Technologies: GCP, Docker, Kubernetes, Airflow, Pandas, Numpy, Matplotlib, Scikit-Learn, Tensorflow, Keras, Flask, FastAPI.

### PROJECTS

- IDiOM: Data collection and analysis pipeline for studying COVID-19 related contents and web dashboard available for citizens. NLP techniques and relative Python implementations (NLTK, BERT, word2vec) involved in the project. Tools used for building microservices architecture: Docker. github link
- Vaccinitaly: Monitor Italian conversations around vaccines on social media (Twitter, Facebook) and understand the interplay between online public discourse and vaccine hesitancy/uptake rates. Techniques and tools used: MongoDB, Python, Scikit-Learn, Pandas, Transformers, Keras, BERT. github link
- FantaNBA Predictor: System for predicting fantasy scores of NBA players in real games, using data science and machine learning techniques. Main languages and frameworks used: Python, Numpy, Pandas, Scikit-Learn, BeautifulSoap, Keras.github link