# Silvio Pavanetto

## Curriculum Vitae





#### Education

2016–2019 Master of Science degree, Computer Science and Engineering, Politecnico di Milano, Italy. Grade: 110/110 Cum Laude.

2013–2016 Bachelor of Science degree, Engineering of Computing Systems, Politecnico di Milano, Italy.

# Work Experience

November **Software Engineer**, *Jobtome*, Stabio, Switzerland.

- 2021 Today O Main responsibilities: study, implement and tune new models for the machine learning projects of the company.
  - Daily tasks: exploration, analysis and visualization of the data that we have (millions of rows per day) with Python libraries like Pandas, Numpy, Matplotlib, Plotly. Development of the machine learning models (using TensorFlow, Keras, Scikit-learn) and deployment in production (GCP products are used for serving models in a distributed and scalable fashion).

October 2019 **Research Fellow**, *Politecnico di Milano*, Milan, Italy.

- 2021
- October Overked on European projects mainly focused on data ingestion, analysis, and visualization, in collaboration with other universities.
  - Cooperated with the rest of my team on every aspect of the projects: requirements, system architecture design, development of software components.
  - Main technologies and libraries used: Python, Pandas, Numpy, Matplotlib, Plotly, Tensorflow, Keras, Scikit-Learn.

February 2019 **Software Developer**, *Telnext / Deloitte Digital*, Milan, Italy.

- August 2019 Worked as a developer on international cloud projects using Salesforce technology, which includes several programming languages such as Java and Javascript.
  - Worked within a team of more than 15 people from different European Deloitte offices.

#### **Publications**

ICWE 2020 - Generation of Realistic Navigation Paths for Web Site Testing using Recurrent Neural Net-Helsinki, works and Generative Adversarial Neural Networks.

Finland Generated high-quality weblog data using deep learning techniques. Compared the 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

CySoc 2021 - VaccinItaly: monitoring Italian conversations around vaccines on Twitter and Facebook;

Online Monitored 3 millions of tweets and 1 million of Facebook posts of Italian users around vaccines in order to understand the interplay between the public discourse on online social media. **Link** 

ICWSM 2021 A Content-based Approach for the Analysis and Classification of Vaccine-related Stances on
- Online Twitter: the Italian Scenario:

Collected and analyzed Italian 3 millions of 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** 

CSCW 2021 - The Contribution of Textual Data from Online Reviews for the Evaluation of Service Quality:
Online The Experience of Italian Museums;

Investigated service quality dimensions of museums through a content analysis based on supervised and unsupervised models for the text of online reviews of 100 Italian museums over a time-period of one year. **Link** 

# **Projects**

 News and Social Media Data Analysis Pipeline related to COVID-19: development of 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

- o Italian Museums Reputation: Development of data collection pipelines and periodical data ingestion systems using MongoDB, Python, and web scraping techniques (BeautifulSoap, Selenium, Requests).
- 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
- Fanta NBA Predictor: Prediction of fantasy scores of NBA players in the real games, using data science and machine learning techniques. Collected a huge amount of statistics from different sources and then used them to perform the analysis and the predictions. Main languages and frameworks used: Python, Numpy, Pandas, Scikit-Learn, BeautifulSoap, Keras.
   Github Link

### Hobbies and Passions

Basketball (I've been playing It since I was 8 years old), Chess, Logical Problems / Puzzles / Riddles, Music (of all kinds): I've played violin and percussion for a few years.

# Languages

Italian Native Speaker

English **Proficient**