# PIETRO PASSARELLA

👤 10551 Berlin 📞 +393497762441 ✉ pa.pietro81@gmail.com

 github.com/PIETRO-ing  linkedin.com/in/pietro-passarella

I am a Data Scientist with a background in aerospace engineering actively looking for a new role in Berlin or in Germany. I want to work for a mobility company or startup looking to reduce our carbon footprint and enhance the customer experience. I am skilled at explaining technical topics to non-technical stakeholders.

## TECHNICAL SKILLS

| | |
|---|---|
| *Data Science* | Python, Bash, SQL, Metabase (Python 3+ years: Pandas, Numpy, Matplotlib, Seaborn, scikit-learn) |
| *Machine Learning* | Regression, Classification, Time Series Analysis, Neural Network, Cloud service: AWS |
| *Deployment* | Keras, TensorFlow, Docker, Flask, Git (version control) |
| *Mathematics* | Calculus, Linear Algebra, Statistics (e.g., A/B test, confidence intervals, error calculation) |
| *Aerospace* | Structural Engineering, Analytical Mechanics, Orbital Mechanics, Flight Dynamics, Fluid Mechanics |

## PROJECTS

| | |
|---|---|
| *Price prediction based on regression* | Housing Price Predictions<br>Supervised Learning (Gradient Boosting Regression, CNN1-d & DNN)<br>Pre-processing using RFE, PCA<br>Tools: Tensorflow, Matplotlib, Seaborn, scikit-learn |
| *Real-time prediction of departures and delays* | Subway departures (S+U Alexanderplatz)<br>Implementation of a dockerized data pipeline with the following workflow:<br>Collect departure information from BVG Berlin & Brandenburg rest API using Requests module.<br>Store the retrieved information in MongoDB.<br>Build an ETL job to:<br>  - extract the departures from MongoDB<br>  - transfer the info to Postgres database<br>  - make constant queries to keep the delay information up to date<br>  - post via a bot |
| *Recommender System (Group Project)* | Movie Recommender System<br>Built a movie recommender with a web interface utilizing the small movielens dataset, which includes a collection of 9742 movies previously rated by 610 users.<br>The aim of the project was to explore and utilize the surprise library and surprise's famous SVD algorithm, then show our outcomes via a web app built with flask. |
| *SQL - Docker* | SQL – Docker<br>Built a database which consists of three tables with all the employees information and made some quiries.<br>Everything running inside docker containers and orchestrated with docker-compose<br>Tools: Docker, PostgreSQL, sqlalchemy, |

# PIETRO PASSARELLA

📍 10551 Berlin  📞 +393497762441  ✉ [pa.pietro81@gmail.com](mailto:pa.pietro81@gmail.com)

 github.com/PIETRO-ing    in linkedin.com/in/pietro-passarella

## EDUCATION

| 2021 | Data Science Bootcamp<br>Spiced Academy, Berlin |
|---|---|
| 2020 | Bachelor Degree in Aerospace Engineering<br>Politecnico di Milano |

## WORKING EXPERIENCE

| 2020-2021 | Tutor, Special for Needs Student – Polymnia S.R.L., Verona, Italy<br>Taught STEM subjects (Maths, Physics, Calculus, Linear Algebra, Classical Mechanics) to students with learning difficulties (dyslexia, dyscalculia, demotivation) and enabled them to improve their grades by adopting a customized study method. |
|---|---|
| 2010 - 2019 | Opera Festival, Verona, Italy<br>Early career in the entertainment and music industry (e.g., stage support, sound engineer)<br>Music Degree: Jazz Trumpet, Scuola Civica Jazz Milan, Italy |

## LANGUAGE SKILLS

| *English* | Fluent |
|---|---|
| *Italian* | Mother tongue |
| *German* | Beginner |

## INTERESTS

Literature, Art, Jazz, African American culture, Revolutionary Women, Cycling, Mountain Climbing