# Sebastian Bertoli

# Junior Data Scientist

## Profile

# **Experience**

#### Sebastian Bertoli

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Data science graduate and machine learning enthusiast. Worked both in academia and the media industry. Amateur cyclist, perfectionist and lifelong learner.

#### Junior Data Scientist / Fraunhofer Italia

March 2018 - Current | Bolzano (Italy)

• Implementation of predictive maintenance models for the manufacturing industry.

#### Data Science Intern / Human Mobility Lab, Kessler Foundation

3 months | July 2017 - September 2017 | Trento (Italy)

- Assisting data science research investigating the mobility patterns of U.S. cities using GPS data.
- Implementation of stop-location extraction and clustering algorithm in Python.
- Data visualization of human mobility patterns and stop locations with ggplot and Tableau.

#### Teaching Assistant in Python programming / Tilburg University

6 months | February 2016 - July 2016 | Tilburg (Netherlands)

- Developed IPython notebooks teaching students the fundamentals of data visualisation in Python.
- Supervised lab sessions and improved teaching effectiveness by reducing head teacher workload.

#### Assistant Researcher / Hogeschool van Amsterdam

3 months | August 2015 - October 2015 | Amsterdam (Netherlands)

- Collaborated on research project "Smart Citizens. Exploring the tools of the urban bottom-up movement."
- Collected and analysed social media data of Amsterdam's citizen communities.

#### **Education**

#### MSc Artificial Intelligence / University of Amsterdam

1 year | September 2016 - June 2017 (18/120 ECTS) | Amsterdam (Netherlands)

- Expanded machine learning knowledge through theoretical study and writing implementations in Python.
- Built information retrieval ranking models (TF-IDF, BM25, etc.) and undertook course in data mining.

#### MSc Data Science: Business & Governance / Tilburg University

2 years | September 2015 - June 2017 | Tilburg (Netherlands)

- MSc thesis: Automatic classification of vessels using historic AIS navigation data.
- Took additional courses in data mining, data protection, law and programming. Wrote privacy assessment of Google Photos.
- Consistently achieved strong grades (GPA > 8.0).

#### rMA Media Studies / University of Amsterdam

1 year | September 2014 – June 2015 (48/60 Ects) | Amsterdam (Netherlands)

- Co-developed the concept for a university-wide interdisciplinary knowledge-sharing and collaboration platform called the "UvA Research Hub".
- Co-authored 60-page study on Amsterdam's Open Data culture revealing a vibrant but narrow-focused urban Open Data culture.

### **Projects**

#### Extracting destinations from GPS data / Internship

https://github.com/sebastianbertoli/Github-internship\_human\_mobility

This project was carried out during my summer 2017 internship at the Bruno Kessler foundation. The goal was to implement a fast algorithm that could extract destinations (places where people stay) from GPS data.

#### Classifying vessels using historical AIS data / Master Thesis

https://github.com/sebastianbertoli/UvT-Thesis

Built a machine learning model using semantic knowledge in order to automatically classify ships based on their historical navigation data.

**Tools** 

Languages: Python, R, SQL, Latex.

Libraries: Scikit-learn, Pandas, Matplotlib, ggplot2, tidyverse.

Software: Tableau, RapidMiner, Git, Illustrator, Photoshop, MS Office.

Languages

German: native English: full working proficiency (C2)

Italian: native Dutch: beginner (A1)