

# IVAN BONGIORNI, Data Scientist

Date of birth: March 17, 1988.  
Address: Via Romagnosi 27, 29015 Castel San Giovanni PC.  
Phone: (0039) 3477861923  
Email: [ivanbongiorni@gmail.com](mailto:ivanbongiorni@gmail.com)  
GitHub: [github.com/IvanBongiorni](https://github.com/IvanBongiorni)  
LinkedIn: <https://www.linkedin.com/in/ivan-bongiorni-b8a583164/>



## SKILLS

Tools:

- Python and TensorFlow.
- Data Science libraries: pandas, numpy, sklearn, statsmodels, alumentations, matplotlib, seaborn, bs4 for web scraping.
- Big data analytics: Coursera certified on cloud computing on Google Cloud Platform, SQL, introductory Spark, PySpark, Hive.
- Git, version control.
- R.

Machine Learning:

- Language models and recommender systems with RNNs and seq2seq architectures.
- Natural Language Processing: word embedding techniques, PoS and NER classifiers, sentiment analysis, constituency and dependency parsing, text classification.
- Computer vision with CNNs: image classification, denoising autoencoders, GANs.
- Unsupervised learning: Autoencoders, dimensionality reduction, clustering techniques.

## PROFESSIONAL EXPERIENCE

### GfK – Data Scientist

September 2018 – Present, Milan, Italy

- Sentiment Analysis and NLP techniques for competition-driven price regulation.
- I increased the accuracy of internal Anomaly detection systems using RNNs.
- I traveled and worked abroad with an international team of Data Scientists for GfK Global (Nuremberg and London) at the development of GfK Newron, a data analytics online platform for automated market insights.
- I was nominated Italian technical reference of GfK Newron for customers.
- Customer segmentation with unsupervised Machine Learning.
- Time series forecasts with RNNs and ARIMA regressions.

## PERSONAL PROJECTS

- GAN Seq2seq Neural Network for imputation of missing data in time series; trained on Wikipedia Web Traffic dataset (Kaggle).  
[https://github.com/IvanBongiorni/GAN-RNN\\_Timeseries-imputation](https://github.com/IvanBongiorni/GAN-RNN_Timeseries-imputation)
- TensorFlow 2 Notebooks on Deep Learning tutorials on multiple Autoencoder, CNN and RNN architectures.  
[https://github.com/IvanBongiorni/TensorFlow2.0\\_Notebooks](https://github.com/IvanBongiorni/TensorFlow2.0_Notebooks)
- Neural Text generator trained on Dante's *Divine Comedy*.  
[https://github.com/IvanBongiorni/TensorFlow2-RNN\\_text\\_generator-Dante\\_DivineComedy](https://github.com/IvanBongiorni/TensorFlow2-RNN_text_generator-Dante_DivineComedy)

Work in progress:

- Chatbot for Customer Support on Twitter; Seq2seq RNN with Attention.  
[https://github.com/IvanBongiorni/Chatbot\\_\\_Seq2seq-Attention-TensorFlow2](https://github.com/IvanBongiorni/Chatbot__Seq2seq-Attention-TensorFlow2)

## RESEARCH

### University of Milan – PhD in Political Economy

January 2014 – May 2018, Milan, Italy

- Statistical research: R programming, time series analysis, event-history models (parametric and semiparametric), multilevel regressions.
- Mathematical theory of games, economic modeling.

## **University of Michigan – Visiting PhD Scholar**

January 2016 – June 2016, Ann Arbor, MI, United States

I worked on statistical analyses of human behaviour with world-renowned scholars, improving my quantitative and analytical skills.

## **University of Michigan**

June 2015 – August 2015, Ann Arbor, MI, United States

I attended courses on R programming, Bayesian statistics, time series analysis and calculus.

## **University of Mannheim**

JUN 2014, Mannheim, Germany

I attended a course on Bayesian statistics.

I won the SGEU (Standing Group of the European Union) tuition grant to access the course.

## **EDUCATION**

### **University of Pavia – Political Science**

*summa cum laude*

April 2013, Pavia, Italy

- Statistical analysis.
- Economics.
- Philosophy of science.

Erasmus Student: Högskolan Dalarna, Borlänge, Sweden (August 2009–January 2010).

### **Istituto G. Marconi – Computer Science degree**

June 2007, Piacenza, Italy

- Computer Science. Languages: Visual Basic, SQL, C#.
- Statistics, probability theory and combinatorics.
- Calculus.
- Stage: I implemented the management software of fine tickets and car accidents for the local Police department.

## **ACHIEVEMENTS**

- I'm in the world top 0.5% on Data Science StackExchange with tags '*Machine Learning*' and '*Deep Learning*'.
- During my PhD, I was accepted to hold Conferences at the University of Oslo and the University of Hamburg where I presented the results of my statistical analyses.

## **STRENGTHS**

- Oral and written communication.
- Committed to lifelong learning.
- Team building.
- Linguistic skills:
  - native Italian;
  - very fluent English;
  - basic French.
- Linux user.