

ARKADIUSZ MODZELEWSKI

Aspiring Data Scientist

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Check my website: <https://arcadiusm.github.io/>



PROFILE

As an engineer with statistical knowledge and business skills I combine best know-how required in Data Science. I constantly work on improving my skills, using the Data Science/Machine Learning courses on coursera.org almost daily. My main characteristics are hard-working and ambitious, resulting in studying at two different universities at the same time. During my Master studies at University of Bonn (world top 35 by Economics & Statistics) I gathered statistical perspective for Data Science as well as experience using R and Python in my projects. My main future goals are to finish my Master project in which I will try to detect anomalies in time series data using LSTM network and finding a job in Data Science/ML.

PROJECTS

- Anomaly detection for time series data with Machine Learning - the ongoing project at current work and in the same time M.Sc. thesis.
Anomaly detection Neural Networks Deep Learning Tensorflow Keras Python Time series
- Random forest for classification problems - research project for Econometrics & Statistics speciality at University of Bonn.
Random forest AdaBoost Gradient Boosting Scikit-learn Bagging Boosting Python
- Big Data: New Tricks for Econometrics - replication of the research paper written by Chief Economist at Google Hal R. Varian plus my addition of other methods not mentioned in the article.
RStudio, R Jupyter Notebook KNN Classifier Lasso Ridge Regression TravisCI nbviewer Python

WORK EXPERIENCE

Working Student - Data Engineer

meinestadt.de GmbH

📅 Since October 2019 📍 Germany, Cologne

- Writing Master thesis at company: Machine learning for anomaly detection for time series data
- Geographic Information System (GIS) migration from Solr to new DWH in PostgreSQL
- Creation of Logstash parser configurations for insertion data to Elasticsearch (work with ELK Stack).
- Migration of data from MongoDB to new DWH in PostgreSQL.

Junior Business Researcher

Pisacane Information Services GmbH

📅 February 2019 – October 2019 📍 Germany, Cologne

- Collection, evaluation and analysis of relevant market data from various business sectors.
- Research for leading international strategy consultancies in various industries.

Student Research Assistant

Max Planck Society

📅 March 2019 – July 2019 📍 Germany, Bonn

- Student Research Assistant at one of the institutes in the Max Planck Society (Max Planck Institute for Research on Collective Goods). Max Planck Society has a world-leading reputation as a science and technology research organization, with 33 Nobel Prizes awarded to their scientists.
- Programming tasks related to various experiments with a constant cooperation with researchers from MPI.

SKILLS

Programming Languages

- Python - many different projects at work and at University of Bonn
Pandas NumPy Tensorflow
Seaborn Matplotlib Scikit-learn
- R - many different projects at work and at Universities
ggplot2 shiny forecast tseries
- C, C++, Java - used only at University

Databases

Oracle MongoDB
PostgreSQL SQL NoSQL

Machine Learning

- Different machine learning methods e.g.:
Random Forest Logistic Regression
PCA KNN Linear Regression
Regularization Gradient Boosting

Econometrics & Statistics

- Time Series Econometrics
- Statistics: statistical tests and procedures

Other platforms and tools

Jira Git Github GitLab
PyCharm LaTeX Solr Jupyter

Other skills and abilities

- The willingness to constantly acquire knowledge and the ability to learn quickly
- The ability to work in a team and analytical thinking

WORK EXPERIENCE

Interim Statistician

European Border and Coast Guard Agency - Frontex

📅 April 2018 – October 2018 📍 Poland, Warsaw

- Preparation of statistical summaries, including data collection, processing and analysis.
- Assistance in managing the data systems.

Market Analysis Trainee

Polish Financial Supervision Authority

📅 September 2017 – October 2017 📍 Poland, Warsaw

- Analysis of the effect of introducing a bank tax on the current banking situation in Poland.
- Forecasting the non-performing loans ratio for selected banks.
- Analysis of the fixed-interest loans available on foreign markets.

EDUCATION

PG Diploma in Machine Learning and Deep Learning

International Institute of Information Technology Bangalore



📅 Since July 2020 📍 India, Bangalore

- Rigorous cutting-edge curriculum developed in collaboration with IIIT Bangalore and industry leaders in deep learning
- Practical learning with industry-relevant projects and case studies

M.Sc. Economics (Econometrics & Statistics speciality)

Rheinische Friedrich-Wilhelms-Universitaet Bonn

🎓 Grade: 2.1

📅 Since October 2018 📍 Germany, Bonn

- 29th in the Academic Ranking of World Universities by subject Economics (Shanghai Ranking 2017)
- Thesis topic: Anomaly detection for time series data with Machine Learning (used language: Python)

B.Sc. Quantitative Methods in Economics and Information Systems

SGH Warsaw School of Economics

🎓 Grade: 4.5

📅 October 2015 – July 2018 📍 Poland, Warsaw

- Speciality: Mathematical Economics
- Thesis topic: Comparative analysis of backtesting of VaR and ES risk estimation methods for the mWIG40, sWIG80 and WIG20 polish stock indexes (used language: R)

B.Eng. Computer Science

Warsaw University of Technology,

Faculty of Electronics and Information Technology

🎓 Grade: 4.5

📅 October 2013 – February 2018 📍 Poland, Warsaw

- Speciality: Information and Decision-Making Systems in Management
- Thesis topic: Scale-city simulation and generation scheme of traffic organisation (used languages/tools: Matlab, R, Shiny)

ACCOMPLISHMENTS

Coursera

- Machine Learning (Approx. 56 hours to complete)
- IBM Data Science Professional Certificate (Approx. 3 months to complete, 13h/week)
- Advanced Data Science with IBM (Approx. 4 months to complete, 5h/week)
- Deep Learning Specialization (Approx. 4 months to complete, 5h/week)

Stanford Online

- Statistical Learning (Approx. 9 weeks to complete, 3-5h/week)

DataCamp

- Data Analyst with Python Track (Approx. 60 hours to complete)
- Python Programmer Track (Approx. 52 hours to complete)

ACHIEVEMENTS



Study Scholarships for Graduates of All Disciplines 19/20

German Academic Exchange Service (DAAD - Deutscher Akademischer Austauschdienst) scholarship for graduate studies at University of Bonn



Finalist of the Mathematics Contest for High School Students

Winners of the competition become students of the Warsaw University of Technology without the recruitment process

VOLUNTEER WORK

The Forum of Nowoczesna Youth

- International Officer of Młodzi .Nowocześni (April 2018 – April 2019)
- Vice President of Młodzi .Nowocześni (April 2018 – November 2018)
- President of Młodzi .Nowocześni Mazowsze (October 2017 – September 2018)
- Social Media Coordinator (March 2016 – October 2017)

LANGUAGES

English	IELTS B2/C1

German	B2

Polish	Native
