Szymon Socha

https://szymonsocha.github.io/

EXPERIENCE

Data Scientist | Python, PySpark, Machine Learning, AML

Feb 2024 – present

TEAM International / PwC Czech Republic

Remote, PL

Data-driven support for the banking industry in the field of Anti-Money Laundering (AML) and financial crime

- Developing and enhancing Anti-Money Laundering (AML) system code using Python and PySpark
- Optimizing transaction monitoring (TM) scenarios by applying statistical methods and machine learning algorithms
- Member of the Financial Crime Technology team

Data Scientist | Python, Machine Learning, NLP, Time Series Forecasting, LLM, Research WeSub

Mar 2023 – Dec 2023 Warsaw (Remote), PL

A member of the team conducting an R&D project aimed at developing innovative models for product categorization and value prediction using machine learning and artificial intelligence algorithms

- Developing price prediction models (**Time Series Forecasting**) by leveraging Natural Language Processing (NLP) and **transfer learning** features
- Researching cutting-edge techniques for employing and fine-tuning of Large Language Models (LLMs)
- Creating NLP models for text generation and classification
- The National Centre for Research and Development (NCBR) project

Data Scientist (Junior) | R, SQL, BigQuery, ETL Flying Wild Hog

Jan 2022 – Apr 2023

 $Warsaw\ (Remote),\ PL$

Analysing telemetry data from video games with a focus on improving User Experience (UX)

- Analyzing video games telemetry data using R and SQL
- Developing dashboards and reports in RMarkdown and Shiny
- Developing ETL processes with BigQuery and MongoDB
- Collaborating with UX Research team members in combining quantitative and qualitative research findings

Data Science Assistant | *Python, R, Econometric Modelling* **Publicis Groupe**

Sep 2021 – Nov 2021

Warsaw, PL

Developing tool for econometric modeling project

• Data cleaning and processing using Python and R and building custom R tools for econometric analysis

EDUCATION

Master of Science in Data Science and Business Analytics

University of Warsaw

GPA: 5/5, **Awards**: Dean's List (Top 7%)

Thesis: Should You Care about Tools in Fake News Detection? A Comparative Study of Cutting-Edge Embedding Methods and Classification Algorithms

Courses: Machine Learning I & II, Unsupervised Learning, Advanced Econometrics, Applied Finance, Statistics, Python, Advanced Programming in R, Big Data Analytics, Algorithms for Data Science, Bayesian Time Series Forecasting

Bachelor of Science in Computer Science and Econometrics

University of Warsaw

Thesis: The Impact of the COVID-19 Pandemic on Music Streaming Consumption

Courses: Machine Learning, Econometrics, Linear Algebra, Statistics, Time Series, Probability Calculus, Finance, Python, R, SQL, C++

Selected Projects

Option pricing Rcpp package $\mid C++, R, Rcpp, Rmd$

Path-dependent European style up-and-out call option pricing with Monte Carlo and Rcpp package

TECHNICAL SKILLS

Languages: Python, R, SQL (BigQuery, KQL)

Tools: Git (GitLab, Bitbucket), FastAPI, Google Cloud Platform, PyCharm, RStudio, Ubuntu

Libraries: PyTorch, PyTorch Lightning, HuggingFace, PySpark, sklearn, pandas, NumPy, tidyverse, dplyr, ggplot2

Expertise: machine learning, natural language processing (NLP), time series forecasting, econometric data modelling, clusterization, dimension reduction, statistics, hypothesis testing

I agree to the processing of personal data provided in this document for realising the recruitment process pursuant to the Personal Data Protection Act of 10 May 2018 (Journal of Laws 2018, item 1000) and in agreement with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).