# Szymon Socha

https://szymonsocha.github.io/

## 

#### EXPERIENCE

Data Scientist | Python, PySpark, Apache Spark, Machine Learning

Feb 2024 – present

Remote, PL

- TEAM International / PwC Czech Republic
  - · Developing, improving, and optimizing the AML system code in Python and PySpark
  - · Optimizing transaction monitoring (TM) scenarios by applying statistical methods and machine learning algorithms
  - · Delivering analysis results and insights in the form of visualizations and reports for clients in the banking sector
  - Member of the Financial Crime Technology team

 ${\bf Data~Scientist}~|~Python,~Machine~Learning,~NLP,~Time~Series~Forecasting,~LLM~{\bf WeSub}$ 

 $Mar\ 2023-Dec\ 2023$ 

Warsaw (Remote), PL

- Conducting R&D to develop new models for product categorization and value prediction within a circular economy framework, using machine learning and artificial intelligence algorithms
- Developing a range of **Time Series Forecasting** models 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

Jan 2022 – Apr 2023

 $Warsaw\ (Remote),\ PL$ 

- Flying Wild Hog
  - 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
  - Working closely with different game development teams and editorial teams around the world in order to understand their requirements and questions related to a project

# $\textbf{Data Science Assistant} \mid \textit{Python}, \; \textit{R}, \; \textit{Econometric Modelling}$

Sep 2021 - Nov 2021

Warsaw, PL

- Publicis Groupe
  - Developing tool for econometric modeling project
  - $\bullet$  Data cleaning and processing using  $\mathbf{Python}$  and  $\mathbf{R}$  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 | 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).