# Szymon Socha

https://szymonsocha.github.io/

### **EDUCATION**

University of Warsaw

Warsaw, PL

Master of Science in Data Science and Business Analytics

2021 - 2023

**GPA**: 5/5, **Awards**: Dean's List 2022 (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, Machine Learning II, Unsupervised Learning, Advanced Econometrics, Applied Finance, Statistics, Python, Advanced Programming in R, Big Data Analytics, Algorithms for Data Science, Bayesian Time Series Forecasting

University of Warsaw

Warsaw, PL

Bachelor of Science in Computer Science and Econometrics

2018 - 2021

Thesis: Investigating the impact of the COVID-19 pandemic on music streaming consumption, utilizing Google Trends activity changes and Spotify statistics. An econometric model is constructed and evaluated using R and Python Courses: Machine Learning, Econometrics, Linear Algebra, Statistics, Time Series, Probability Calculus, Finance, Python, R, SQL, C++

#### EXPERIENCE

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

Apr 2023 – Present

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
- The National Centre for Research and Development (NCBR) project

Data Scientist (Junior) | R, SQL, BigQuery, ETL

Jan 2022 – Apr 2023

Flying Wild Hog

Warsaw (Remote), PL

- 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

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

Sep 2021 – Nov 2021

Publicis Groupe

Warsaw, PL

- Developing tool for econometric modeling project
- Data cleaning and processing using Python and R and building custom R tools for econometric analysis

# SELECTED PROJECTS

Neural Network Performance Comparison | Python, Neural Network, LightGBM, XGBoost, Random Forest

• Comparison of neural network performance with other ML algorithms for two different types of data (image classification and regression)

Traffic Prediction | Python, sklearn, Random Forest, Linear Regression, KNN, SVM, Rmd

• Traffic prediction using multiple ML algorithms. Data manipulation and feature engineering

#### 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), Google Cloud Platform, PyCharm, RStudio, Ubuntu Libraries: PyTorch, HuggingFace, 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).