BAKWENYE BENJAMIN

PERSONAL PROFILE

2 years of experience with Data Science and **3 years of experience** with python. Interested in leveraging AI to create data-driven solutions. Passionate about LLM research, predictive modelling, text data analysis, and NLP related tasks. Quick learner and self-motivated.

CONTACT

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<u>LinkedIn</u> <u>GitHub</u> Portfolio

EDUCATION

Master in Data Science | 2023 Barcelona School of Economics, 08005 Barcelona, Spain

MEng Mechanical Engineering | 2015 - 2017 Peoples' Friendship University, Moscow, Russia

SKILLS

Python | Graduate Research R, Stata | Graduate Research SQL | MySQL English, Russian | Fluent

Spanish, French | Beginner

Version Control | Git

Cloud | AWS

Libraries | Scikit-learn, PyTorch, Keras, Tensorflow, Pandas, Numpy, sklearn, statsmodels

Econometrics | A/B testing, Counterfactual Reasoning

Machine learning | Supervised and unsupervised models, Transformers, RNN, CNN NLP | Sentiment analysis, Topic Modeling using LDA, LLMs, Regex, Webscraping with BeautifulSoup, Selenium and Scrapy, JSON parsing

Data Visualization | Pyplot, Matplotlib, Seaborn, Tableau, Shiny

Front-end | HTML, CSS, JavaScript **Soft-skills** | Adaptability, Teamwork, Curiosity, Communication, Problem-solving, Critical thinker, Analytical

LEARNING

Docker Saturn Cloud Apache Hadoop

WORK EXPERIENCE

Barcelona.

Research Data Scientist | August 2023 - Present Department of Economics and Business, Universitat Pompeu Fabra,

- Scraped and built a robust database on lawyers in Spain.
- Developed and fine-tuned an LSTM model for gender classification of Spanish names.
- Conducted a thorough analysis of the collected data to uncover and report on gender disparities within the legal profession, providing insightful conclusions on gender dynamics.

Research Data Scientist | October 2023 - Present

Department Finance and Management, IESE Business School, Barcelona.

- Built a pipeline for extracting relevant text data from FOMC reports.
- Increased FOMC forecast by 10% by fine-tuning machine learning models on time-series data using innovative TabText approach alongside embeddings.

Graduate Thesis, Oxera & the Barcelona School of Economics | April 2023 - July 2023

- Created an automated feature extraction from merger documents using LLMs.
- Created a pipeline and chatbot for efficient extraction and summary of key features in legal documents, significantly reducing analysis time. Challenge proposed by Oxera to the Barcelona School of Economics.

Projects | Patient mortality risk and stay duration

 Predicted patient's mortality rate with 87% accuracy and patient's length of stay with 90% accuracy.

Mechanical Engineer Researcher | January 2020 - January 2022 People's Friendship University, Moscow Department of Advanced Mechanical Engineering and Production Automation Systems

 Area of research: Additive technology and enhancing surface smoothness of 3D printed objects.

Mechanical Design Engineer | January 2019 - December 2019 Helyx Technologies, Moscow.

- Developed, documented and designed mechanical systems and components for filtration systems.
- Boosted departmental productivity by 8%, directly contributing to a revenue increase of over \$150,000 in just six months through strategic improvements in design and process optimization.
- Directed talent acquisition, development, and oversight of design interns, optimizing cross-functional team efficiency and integration between design and manufacturing workflows.

Mechanical Design Engineer Intern | January 2017 - April 2017 APM, Korolyov, Russia

 Simulated and analyzed resonance vibrations in milling processes using ANSYS, SOLIDWORKS, and APM.

Mechanical Design Engineer Intern | January 2016 - January 2017 Cryogenmash, Balashikha, Russia

- Calculated, estimated, and documented technical requirements for cryogenic cooling tubes for ITER fusion project.
- Coordinated meetings with international liaisons for the project, facilitating effective communication and project advancement.