

Filip Makraduli

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EDUCATION

Imperial College London

London, UK

Master of Research in Biomedical Research - Data Science (Grade: Distinction)

- 2 research projects & core training lectures in biomedical Data Science subjects

Faculty of Electrical Engineering and Information Technologies

Skopje, MKD

BSc. in Electrical Engineering and Information Technologies

- Coursework in the field of computer architectures, electronics, and signal processing

EXPERIENCE

Data Scientist

Sept 2022 – present

Marks and Spencer

London, UK

- Introduced a novel product similarity solution using sentence transformers and Hierarchical Navigable Small World Graphs (HNSW) to do dense vector clustering used for estimating cannibalisation
- Deployed an internal web app to visualise treatment effect, propensity scores, and incremental product sales
- Validated the allocation of Christmas shopping offers to 16 million users in the UK Sparks customer base
- Contributed to company code for a LightGBM model for predicting stock file errors from tabular data

Python trainer

March 2022 – August 2022

Keitaro

Skopje, MKD / Malmo, SE

- Developed Python training programs, courses, and materials for employee upskilling in companies

Postgraduate Researcher

March 2021 – Sep 2021

AstraZeneca

London / Cambridgeshire, UK

- Constructed AI pipelines and applied Grad CAM and SHAP algorithms for an end-to-end explainability of 3D CT COVID-19 imaging datasets - evaluated using binarization thresholds
- Trained 2D image classification with VGG16 and 3D CNN image classification algorithms in Keras/Tensorflow on chest scans datasets - 70 to 76 % testing accuracy

Postgraduate Researcher (Project)

Oct 2020 – March 2021

Imperial College London

London, UK

- Developed a web app for entity recognition and summarisation using 2.5K biomedical literature papers
- Used regular expressions - F1 score: 93.4%, SpaCy ResNet CNN with bloom embeddings - F1 score: 76.8% and pre-trained Bart-large-MNLI model for topic modelling
- I published as a co-author in Frontiers in Digital Health with “Auto-CORPus: A Natural Language Processing Tool for Standardising and Reusing Biomedical Literature” for my involvement with another project in the lab.

Product management consultant

May 2019 – Dec 2019

PNA Technology

Skopje, MKD

- Suggested technology solutions and partly executed the sales processes for an IoT product that tracks and visualises the downtime of machines in factories. Identified customer needs and recommended improvements and secured an investment of 30K € for the business

LEADERSHIP & ACTIVITIES

Generated 100K views on a TikTok in 24h: Developed a 3-video strategy for an event and tested the videos on my personal account, generating 100k views in 24h and more than 150k views in a week.

Algothon virtual 2021 (4th out of 20 teams): Facilitated a group of 3 in trading data visualisation, data cleaning, and algorithmic trading tasks at a hackathon by the Imperial College Algorithmic Trading Society.

Skopje startup weekend 2018 (1st place): Created a business model for a no-coding deep learning platform

Committee President 2017: Spoke and debated about science, technology, and industry at an international model European parliament session.

SKILLS & INTERESTS

Skills: Python, Streamlit, Googling, SpaCy, Git, Keras, Huggingface, Pandas, SQL, PySpark, Databricks, NumPy, Langchain, Pytorch FAISS, Tensorflow, Opencv, Azure ML pipelines, Causal ML, ML Flow, Arduino, Raspberry Pi