

Work Experience

Quantcast

London, UK

- Sr. Machine Learning Engineer*

Spring 2023 – Present

- Machine Learning Engineer*

Summer 2021 – Spring 2023

- Lead a contextual insights and targeting solution — Ara TopicMap, involving writing, optimising and debugging Spark queries to process massive amounts of unstructured data from the Internet and applying machine learning techniques using Spark MLlib, PyTorch and scikit-learn.
- Optimized Spark pipelines and GPU-accelerated LLM inference, delivering six-figure annual cloud savings.
- Built a robust moderation system on an accelerated timeline to mitigate regulatory risk; partnered closely with non-engineering stakeholders (Legal & Privacy).
- Designed and implemented a capacity-constrained, semi-streaming clustering algorithm for webpage embeddings, alongside parsing/embedding generation upgrades; built a custom labelled evaluation dataset to guide model and algorithm selection, delivering double-digit gains in clustering quality.
- Developed an internal Python library to load datasets by date range via a simple, consistent API.
- Spearheaded the creation of an internal Python style guide, improving code consistency and maintainability.
- Team's go-to engineer for Spark and Python; mentored 3 new MLEs through onboarding, resolved complex performance and debugging issues across the team, improving pipeline reliability and delivery speed.

R&R Technology

Vilnius, Lithuania

- Software Engineer*

Spring 2021 – Summer 2021

- Developed software for an autonomous hospital disinfection robot using ROS and C++.
- Set-up the robot's embedded x86 computer by installing and configuring Linux, peripheral drivers and compiling proprietary libraries.
- Worked on adding real-time rigid object pose estimation capabilities using a depth sensing camera (Intel RealSense) by processing 3D point clouds and generating Viewpoint Feature Histogram descriptors using ROS, PCL and C++.

Education

University College London

London, UK

- BSc Computer Science — First Class Honours*

Sep 2017 – Aug 2020

- BSc Thesis: Anomaly detection in parcel X-rays using Siamese and triplet neural networks

Skills

Languages: Python, SQL, Bash, Emacs Lisp, C++.

Software: Spark, Unix, Git, MLFlow, Airflow, Poetry, Grafana, \LaTeX .

Libraries: PyTorch, PySpark, pytest, NumPy, scikit-learn, Pandas, Pydantic, FastAPI.