STÉPHANE COUVREUR

ABOUT

I have a passion for big data, real-time processing and distributed systems.

FXPFRIFNCF

Cloudflare, Lisbon - Senior Data Engineer

APR 2022 - PRESENT

- Migrated PostgreSQL pipelines from Spark to Go, increasing throughput 14x (85k to 1.2M rows/s) and reducing ingestion time (15h to 1h20m), memory usage (94%) and read-replica load.
- Monitored Kubernetes cluster (Prometheus/Grafana), managed CI/CD, on-call PagerDuty rotation.
- Maintained Debian Linux versions, secured Postgres/ClickHouse credentials (Saltstack/Vault).

Cloudflare, Lisbon - Data Engineer

JAN 2021 - MAR 2022

- Developed high-throughput Spark pipelines processing 30B+ rows/day (5 TB/day).
- Integrated ClickHouse and Prometheus data for data center analysis and capacity planning.
- Built Airflow tools to track data lineage, reducing incidents by 37% and MTTR by 50%, and saving the team 800+ man-hours per quarter.

Feedzai, Lisbon - Data Scientist

OCT 2018 - DEC 2020

- Developed ML models detecting transaction fraud with 78% \$ recall at 1% FPR in Spark.
- Supported production systems with throughputs of >2k events/s and <200ms latency at 99.999%.
- Built Spark pipelines on Hadoop clusters to train models on >1B rows of historical data.

Great Ormond Street Hospital, London — Research Assistant

JUL 2017 - SEP 2018

- Collaborated with engineers and clinicians building cardiac MRI segmentation pipelines.
- Implemented a whole-heart segmentation workflow achieving an AUC of 0.752 using 3D CNNs.
- Secured 2 successful grants from NVIDIA and Medtronic.

EDUCATION

UCL, London - Master of Engineering (1st Class, Hons)

SEP 2013 - JUN 2017

• Specialized in Computer Science and Medical Imaging.