

# STÉPHANE COUVREUR

---

## ABOUT

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

## EXPERIENCE

### Cloudflare, Lisbon – Senior Data Engineer

APR 2022 – PRESENT

- Migrated Apache Spark ingestion pipelines to Go improving peak throughputs from ~85k to 1.2M rows/s from Postgres, reading >4B rows/day.
- Reduced daily Postgres ingestion memory consumption 94% and ingestion time from 15h to 1h20m using b-tree index histograms, relieving constrained CPU and memory in core datacenter.

### Cloudflare, Lisbon – Data Engineer

JAN 2021 – MAR 2022

- Developed data pipelines in Apache Spark with throughputs of >30B rows and >5TB/day.
- Aggregated ClickHouse traffic and Prometheus metrics data from core and edge data centers.
- Built data lineage sensing tools in Airflow, reducing data lineage incidents by 37%. Reduced MTTR and number of incidents by >50% QoQ, saving a 22-person 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 Apache Spark.
- Built data pipelines on Apache Hadoop clusters to train models on >1B rows of data.
- Supported production systems with throughputs of >2k events/s and <200ms latency at 99.999%.

## EDUCATION

### UCL, London – Master's Degree, Mechanical Engineering

SEP 2013 – JUN 2017

- Thesis in Computer Science and Medical Imaging.

## AWARDS

### Feedzai Hackathon – Brand Award

OCT 2018

- Created a team slide generator in GSuite with data from Namely. Competed against 27 teams.