

# Mourjo Sen

<https://mourjo.me> | hello@mourjo.me

## EXPERIENCE

### **BOOKING.COM** Senior Software Engineer, Fintech

April 2023 - Present

- Interim **staff engineer** focusing on cross-team projects in 2025
- **Tech lead for architecture modernization** of legacy backend systems
  - Facilitated the move from **monolith to domain-driven microservices**
  - In 5 projects, 60 modules, 130 APIs, 2K requests/sec, 145K lines of code
  - Drove **architecture vision and prioritization of projects** for yearly planning
- Solved hard engineering problems using Java (Spring Boot), MySQL, Kafka, Redis
  - Built **core workflow engine** for configuration change orchestration
  - **Zero downtime deployments** for critical backend services
  - Reduced CI build time by 50%
- Nurtured company-wide **engineering culture**
  - Helped improve **engineering productivity** (DORA) metrics
  - Engineering **craft mentor** for new joinees and new graduates
  - Presented internal workshops, talks and blogs on engineering topics

### **STRIPE** Software Engineer

March 2022 - April 2023

- Worked on **identity verification platform** used in onboarding of accounts, supporting world-wide regulatory requirements.
- Built a tool for **automated feature parity testing** in APAC countries.
- Worked on backend systems using Ruby, MongoDB, Redis, Kafka.

### **GOJEK** Lead Software Engineer, AdTech

February 2021 - March 2022

- Led development of the **advertisements platform**: ad serving, ranking, telemetry.
- Service-oriented architecture using Elixir, PostgreSQL, Redis, Elasticsearch.
- Stream processing using Flink, Kafka, Airflow, BigQuery.

### **HELPSHIFT** Software Engineer III

October 2015 - February 2021

- Built backend services that handle **30K requests/sec**
- Modernization of legacy Hadoop platform handling 1 PB of data to "Delta Architecture" using Apache Spark, Delta Lake, Databricks.
- Built an **ETL platform** for no-code data pipeline ingesting from multiple sources into the data warehouse with transformations.

### **SPAM DETECTION IN TWITTER** Internship at Inria

April 2014 - August 2015

- **Master thesis** on detecting spam behaviour by analyzing the Twitter social graph
- Included a 6-month internship funded by **Microsoft Research**.

## TALKS

- *Digaram Driven Development at Future of Software Copenhagen* 2025
- *Untangling the API Spaghetti With BPMN Diagrams* at **APIDays India** 2025
- *Resilience in microservices with congestion control* at **Tech Summit Amsterdam** 2025
- *Avoiding accidental quality* at **techexcellence.io** 2025
- *Property based testing to preserve invariants* at **Techcamp Hamburg** 2025
- *What can flow metrics teach us about building designing resilient systems* at **Monster Scale** 2025
- *Building resilient services in Clojure* at **re:Clojure** 2020
- *A fair task execution framework* at **In/Clojure** 2019

## ARTICLES

- Finding hidden bugs with **Generative Testing** (published on InfoQ)
- Applying flow metrics to design **Resilient microservices** (published on InfoQ)
- **Structured logging** in Spring Boot
- Three reasons why developers **should use DuckDB** (published on Towards DataScience)
- Achieving **graceful shutdowns** in Clojure
- A case-study on **parallelizing tests**
- Two research papers on **IEEE**

## EDUCATION

### **UNIVERSITÉ NICE** Masters in Computer Science 2013 - 2015, Nice, France

- Specialized in **Computer Networking**
- **Full scholarship** awarded by Labex UCN@Sophia.

### **ST. XAVIER'S COLLEGE** Bachelors in Computer Science 2010 - 2013, Kolkata, India

## LINKS

- [github.com/mourjo](https://github.com/mourjo)
- [linkedin.com/in/mourjo](https://www.linkedin.com/in/mourjo)
- [mourjo.medium.com](https://medium.com/@mourjo)
- [twitter.com/mourjo\\_sen](https://twitter.com/mourjo_sen)