# 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 cuture
  - 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.
- Sessionization of event streams for telemetry and rank estimation.
- Service-oriented architecture using Elixir, PostgreSQL, Redis, Elasticsearch.
- Stream processing using Flink, Kafka, Airflow, BigQuery.

#### HELPSHIFT Data Engineer III

March 2020 - February 2021

- 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.

#### HELPSHIFT Backend Engineer III

October 2015 - February 2020

- Built services that handle 30K requests/sec
- Property-based testing using QuickCheck for automated test-case generation and verification

#### SPAM DETECTION IN TWITTER Internship with Dr Arnaud Legout, 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/BLOGS

- **InfoQ article** on designing resilient microservices.
- Talk at **Monster Scale 2025** on "What can flow metrics teach us about building designing resilient systems?"
- Technical blog posts with 95K reads since 2018.
- Talk at **re:Clojure 2020** on "Building Resilient Services in Clojure".
- Talk at **In/Clojure 2019** on "A Fair Task Execution Framework".
- Three research publications, two 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

#### MOOCS

2017 - present

- Data Engineering with Google Cloud, 2021
- Ultimate hands-on **Hadoop**: Tame your big data, 2020
- Introduction to Functional Programming in OCaml (Université Paris Diderot), 2019
- Functional Programming Principles in Scala (École Polytechnique Fédérale de Lausanne), 2017

## LINKS

- github.com/mourjo
- linkedin.com/in/mourjo
- mourjo.medium.com
- twitter.com/mourjo\_sen