# Mourjo Sen

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

# **EXPERIENCE**

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

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
  - o In 5 projects, 60 modules, 130 APIs, 2K requests/sec, 145K lines of code
  - o 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
  - o 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

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

- Upcoming talk at Monster Scale 2025 on "What can flow metrics teach us about building designing resilient systems?"
- Technical blog posts with 89K 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