

Mourjo Sen

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

EXPERIENCE

BOOKING.COM Senior Software Engineer

April 2023 - Present

- Worked on **payment configuration management** and orchestration of changes
- Leading **re-architecture of microservices** focused on correctness and explainability
- Using **Spring Boot** on **Kubernetes** with **MySQL**, **Kafka** and **Hadoop**

STRIPE Software Engineer

March 2022 - April 2023

- Building multi-party payment flows in APAC countries.
- High scale backend using **Ruby**, **MongoDB**, **Redis**, **Kafka**.
- **Automated payment** flow test suite for APAC countries.

GOJEK Lead Software Engineer

February 2021 - March 2022

- Built the backend **advertisements platform**: ad serving, ranking, telemetry.
- Leading **architecture decision reviews** and design choices.
- **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**.
- **ETL platform** for no-code data pipeline ingesting from multiple sources into the data warehouse with transformations.
- Rearchitect legacy data pipelines that **maintain timeliness** with late arriving data.

HELPSHIFT Backend Engineer III

October 2015 - February 2020

- Services that handle **30K requests/sec** using Clojure with **Elasticsearch**, **ScyllaDB/Cassandra**, **MongoDB**, **Kafka**, **Redis**.
- Resilience components for services: **load shedding**, **circuit breaking**, **resource pooling**.
- Property-based testing using the **QuickCheck** method to automate test case generation.

SPAM DETECTION IN TWITTER with Dr Arnaud Legout, Inria

April 2014 - August 2015

- Analyzing the **Twitter graph** to find a measure of "trust" based on users' activities and connections on Twitter, to detect spam behaviour.
- Followed with a 6-month internship on this topic funded by **Microsoft Research**.

PERSONAL PROJECTS

July 2012 - present

- **Bounded recursive generator** for property-based testing in Clojure. git.io/JtA9p.
- **Load shedding middleware** in HTTP servers <https://git.io/J1IK8>.
- **Request timeout handler** for async request processing in Clojure's Ring/Jetty adapter. git.io/JtASo

ACHIEVEMENTS

- **Career mentor** at Springboard and Mentor Cruise.
- Conference talk at **re:Clojure 2020** on "Building Resilient Services in Clojure".
- **30K+** reads on technical blog posts on Medium.
- Three research publications, two on **IEEE**.
- Conference talk at **In/Clojure 2019** on **A Fair Task Execution Framework**.
- Laboratory of *Excellence* (LABEX) **scholarship** of € 12,500 awarded by Labex UCN@Sophia for Master's degree.

EDUCATION

UNIVERSITÉ NICE MS in Computer Science

2013 - 2015, Nice, France

- Fully funded
- Specialization in Networking
- Grade: 15.98/20 (**80.1%**)
- Rank: **1st**

ST. XAVIER'S COLLEGE

BSc in Computer Science

2010 - 2013, Kolkata, India

Grade: 83.6% (**Rank 4th**)


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](https://www.linkedin.com/in/mourjo)

 medium.com/@mourjo_sen

 twitter.com/mourjo_sen