

# Mourjo Sen

sen.mourjo@gmail.com | mourjo@mourjo.me  
+91 98307 47541 | +91 91725 73349  
<http://mourjo.me/>

## EXPERIENCE & PROJECTS

### HELPSHIFT Backend Software Engineer II

October 2015 - present

- Working with industry-standard technologies – Elasticsearch, MongoDB, Redis, Apache Kafka, ScyllaDB in **Clojure**.
- “Subject-matter expert” for **Elasticsearch-related** work at Helpshift.
- Wrote a custom-DSL-based **search engine** using **Elasticsearch**, which searches ~90M documents in less than 300 ms, while providing helpful **autocompletions**.
- Wrote property-based tests (generative tests) using the **QuickCheck** method to automate test case generation.
- “Subject-matter expert” for benchmarking and **capacity-planning** technologies at Helpshift.
- Part of **technical interview panel** at Helpshift.

### 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.
- Using Twitter **REST APIs** and **Streaming APIs** to collect data.
- Followed with a 6-month internship on this topic funded by **Mircosoft Research**.

### PET PROJECTS

February 2011 - present

- EduSoc**: A web-based **social network for education** that promotes education by making it a social activity. Developed using **PHP** and **MySQL**. [github.com/vabh/EduSoc](https://github.com/vabh/EduSoc).
- JChirp**: A **Java wrapper** to access to the Twitter REST and Streaming APIs with authentication. [github.com/vabh/JChirp](https://github.com/vabh/JChirp).
- Alienvation**: Developing a GUI game using **Java Swing** in which a player controls spaceships and fights against aliens. [github.com/mourjo/Alienvation](https://github.com/mourjo/Alienvation).
- Reconnect**: A simple Python script to reconnect to a specific internet portal using **Selenium Web Driver**.
- A **Gmail webapp** to show statistics of a Gmail inbox. [github.com/mourjo/gmail-webapp](https://github.com/mourjo/gmail-webapp).

### OTHER PROJECTS

July 2012 - January 2015

- Scheduling virtual machines** in a simulated datacentre to meet the SLA, minimize energy consumption and maximize revenue. Used CloudSim framework.
- AI game engine** in Java for the African game Oware.
- CreatureSim**: A Java project to simulate an environment with **communicating independent agents** that move around, form groups, search for interest points and have real-time **plugin-based behaviour**.
- Three research publications, two of which are **IEEE publications**.

## EDUCATION

### UNIVERSITÉ NICE

MS in Computer Science

2013 - 2015, Nice, France

– First Year:

- Grade: 15.18/20 (**75.9%**)

- Rank: **2<sup>nd</sup>**

– Second Year:

- Specialization in Networking

- Grade: 15.98/20 (**80.1%**)

- Rank: **1<sup>st</sup>**

### ST. XAVIER'S COLLEGE

BSc in Computer Science

2010 - 2013, Kolkata, India

Grade: 83.6% (**Rank 4<sup>th</sup>**)

## AWARDS

- Spot Award** at Helpshift during the very **first award ceremony** in the history of the company for a year of distinguished work.
- Laboratory of Excellence (LABEX)** scholarship of € 12,500 awarded by Labex UCN@Sophia for first and second year of MS.

## PROGRAMMING LANGUAGES & TOOLS

Proficient:


Clojure • Java • Elasticsearch • Emacs • Python • PHP • Git • MongoDB


Familiar:


C++ • Vagrant • Apache Kafka •  $\LaTeX$  • Tsung


## LINKS

 [github.com/mourjo](https://github.com/mourjo)

 [linkedin.com/in/mourjosen](https://www.linkedin.com/in/mourjosen)

 [twitter.com/mourjo\\_sen](https://twitter.com/mourjo_sen)

 [quora.com/Mourjo-Sen](https://www.quora.com/Mourjo-Sen)

 [facebook.com/sen.mourjo](https://www.facebook.com/sen.mourjo)