

# Shubham Shekhar Jha

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☎ (469) 238-6219 | 📍 Richardson, TX

## EDUCATION

### The University of Texas at Dallas

M.S. in Computer Science | GPA: 3.9 / 4.0

Aug 2022 – Current

Richardson, TX

### Indian Institute of Technology (Banaras Hindu University), Varanasi

B.Tech. in Metallurgical Engineering | GPA: 7.80 / 10

Jul 2014 – May 2018

Varanasi, India

## SKILLS

**Languages** : Java, C++, Rust, Javascript, Python

**Back-end Technologies** : Spring Boot, Express, Redis, Kafka, Docker, Kubernetes, ApacheMQ, AWS IoT

**Front-end Technologies** : Android, React Native, React

**Databases** : MongoDB, PostgreSQL, Cassandra, Firebase

## EXPERIENCE

### Walmart Global Tech

Software Engineer III | Walmart Mexico e-Commerce

Dec 2020 – July 2022

Bangalore, India

**Promotions & Discounts** | Spring, Kafka, Cassandra

- Migrated Promotions platform out of legacy engine to Spring microservices. After migration, Cart page load time reduced from 2.5s to 1s, saved \$MXN 16M in licensing fees, and promotion set-up time reduced by 96%.
- Engineered a unified platform for in-store and e-Commerce promotions, enhancing customer experience and speeding up campaign rollouts by 50% over the previous separate systems.
- Implemented robust Disaster Recovery measures, such as Kafka topic mirroring and extensive ECV checks, ensuring server reliability across two data center regions.
- Devised an Auto-Renewal Payment solution to enhance customer convenience and reduce manual renewal processing for Walmart Mexico's membership programs, initially rolled out to 20% members.

### OYO Rooms

Software Development Engineer I & II | IoT Team

Jun 2018 – Dec 2020

Bangalore, India

**Internet of Things** | Spring Boot, AWS IoT, Redis, Kafka, MongoDB, Docker, Kubernetes

- Developed a scalable back-end from scratch for a network of more than 50,000 Energy-monitoring and conserving IoT devices, OYO Switch, deployed in 6,000 hotels across India.
- Created a React based web portal to visualize the devices' health and analytical data. About 10 Tech-support employees used this website to troubleshoot the installed IoT devices.
- Piloted smart hotel rooms equipped with IoT enabled appliances controlled by Alexa voice commands, boosting guest convenience and repeat stays by 30%. Integrated Alexa toolkit and the back-end server using AWS Lambda.
- Spearheaded the design and implementation of a back-end for an innovative Bluetooth Offline Smart-lock, serving 500+ vacation properties. Complimented this with a React Native app for efficient lock setup and upkeep.

## PROJECTS

### Mini P2P File-sharing application | C++, Sockets, Multi-threading [\[about\]](#)

July 2023

- Crafted a P2P file-sharing application handling 15 peers via TCP sockets, employing iterative node hops in a BFS approach for optimized file-search; A course project in Advanced-OS (CS6378).

### Simulated OS | Rust, Sockets, Semaphores [\[about\]](#)

June 2023

- Reimplemented a simulated OS in Rust featuring a round-robin scheduler and a TCP-connected virtual printer using semaphores to synchronize printing for up to 5 simulated computers; An OS (CS5348) course project, [originally written in C](#).

### Community Funding Platform | Spring Boot, React, Android, PostgreSQL [\[about\]](#)

Feb 2020 – May 2020

- Built a [Spring Boot back-end](#) for a community funding app & website, incorporating Firebase and PostgreSQL for data management and Instamojo for secure payments with the capacity to onboard 50,000 users.
- Created an [Android application](#) with a streamlined 3-step signup, facilitating easy creation and sharing of community events, along with efficient funds management.
- Developed a [React website](#) to facilitate secure, hassle-free 5-step payments for community events via Instamojo.