

Shubham Shekhar Jha

✉ shubhamshekhar.jha@utdallas.edu | [in linkedin/shubhamshekharjha](https://www.linkedin.com/in/shubhamshekharjha) | [github/2sjha](https://github.com/2sjha) | 2sjha.github.io
☎ (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, Python, Javascript

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

Leetcode Boilerplate Generator | Rust, GraphQL, Leetcode [\[about\]](#)

Feb 2024

- Developed a Rust app to automatically generate compilable boilerplate code for problems using LeetCode's GraphQL APIs, including driver code with example input and output calls. The app works for approximately 70% of the platform's problems.

Machine Learning Projects | Python, Scikit-learn [\[about\]](#)

Sep - Dec 2023

- Implemented various ML algorithms from scratch including Naive Bayes, Logistic Regression, Collaborative Filtering, K-means clustering, Expectation Maximization and Random Forest. Multiple course projects in ML (CS6375).

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

- Created 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](#).