

# KIRUSHAN BALAKRISHNAN

[in LinkedIn](#) | [+94-76-3760701](#) | [kirushan.org](#) | [kirushanbalakrishnan@gmail.com](#) | [GitHub](#)

---

## Skills

**LANGUAGES** | JavaScript • TypeScript • Java

**FRONT END DEVELOPMENT** | React • Next.js • React Native • Redux • Redux-Saga • HTML • SCSS • React Testing Library • Jest

**BACK END DEVELOPMENT** | Node.js • Express.js • SpringBoot • AKKA • TypeORM

**DATABASE** | PostgreSQL • MySQL • Firebase firestore • Amazon DynamoDB

**CLOUD** | AWS • Firebase • Netlify

**OTHER** | Docker • Kubernetes • Git

## Professional Experience

### Prenetics

Chennai, India (Remote)

Senior Software Engineer - Fullstack

Jan 2022 – present

As a member of the engineering team at Prenetics, accountable for ensuring the technical quality of web applications for both Circle products and ProjectScreen HK. Contributed to developing internal tools and automation processes to improve development efficiency and productivity. Participated in code reviews and provided feedback to ensure code quality and consistency.

1. circledna.com (D2C E-commerce website) (Project lead)
  - Designed and developed using Next.js(v13 App router), resulted in an impressive web score of over 95%.
  - Deployed on AWS using SST and OpenNext.
  - Created automated campaigns and flash sales, which drove 70% of total revenue in 2023.
  - Implemented SEO best practices that resulted in a 15% increase in organic search traffic.
  - Tech: FE: Next.js, React(TypeScript), AWS CloudFront, AWS Lambda, Cloudflare, BE: Node.js, Express.js, TypeORM, PostgreSQL
2. order.circledna.com (Checkout application)
  - Developed application and integrated with Stripe payment gateway to support Visa, Mastercard, Amex, Atome, PayPal, Alipay, Apple Pay, and Google Pay.
  - Checkout served more than 3000 orders per month in 2023.
  - Tech: FE: React(TypeScript), Vite, React Testing Library, Jest, React Hook Form, Yup, AWS S3, BE: Node.js, Express.js, TypeORM, PostgreSQL
3. account.circledna.com/app.prenetics.com (Account management)
  - Developed to provide authentication and account management for all Circle applications.
  - Tech: FE: React(TypeScript), Vite, React Testing Library, Jest, React Hook Form, Yup, AWS S3, BE: Node.js, Express.js, TypeORM, PostgreSQL, OAuth 2.0
4. Circle mobile application
  - Developed a referral program with a consolidated screen to manage all referrals and history.
  - Tech: FE: React Native, BE: Node.js, Express.js, TypeORM, PostgreSQL

### NCINGA

Colombo, Sri Lanka

Software Engineer

Dec 2019 – Dec 2021

Member of the core team that designed and developed the NCAP (network capacity planning tool), made for network providers to plan and maintain their networks.

- Successfully managed a high-stakes project involving the daily ingestion of 14 million records from various CSV files into a complex three-step sequential process for critical calculations. Initially, the project employed a Java ExecutorService with a fixed thread pool. However, the system encountered persistent issues, including race conditions and deadlocks, leading to substantial processing delays. To overcome these challenges, I migrated the entire process to the AKKA framework, a concurrent actor-based system, with its capabilities such as multiple actors in a divide-and-conquer approach where each actor can notify its parent of the failure. This solution outperformed its predecessor by 75%.
- Tech: SpringBoot, Java, React, AKKA, RabbitMQ, MySQL, Linux server

## Education

### Jawaharlal Nehru Technological University

June 2015 - June 2019

Bachelor of Technology Electrical and Electronics Engineering (First Class)