



EDUCATION

Full Stack Web Development (Full-Time)

A-Grade

Masai School, Bengaluru

December 2022 - August 2023

Degree in History Hons.

B.A. : 82%

Scottish Church College, Kolkata

July 2018 - August 2022

Secondary Education

Intermediate 90%

K.V.Cossipore, Kolkata

April 2016 - May 2018

TECHNICAL SKILLS

Languages & Frameworks: JavaScript, Python, Django, Express.js, Ruby On Rails, Ruby

Libraries and Tools: React, Redux, Node.js, Webpack, Babel, HTML5, CSS3, Sass, Redis, WebSocket

Database Skills: PostgreSQL, SQL, MongoDB, Psycopg2, Django ORM, Rails

Coding Skills: OOP, Data Structures and Algorithms, Competitive Programming

WORK EXPERIENCE

Software Development Engineer I

K12 Techno Services Pvt. Ltd, Bangalore, India

Front-End Developer Performance Optimization and Efficiency:

December 2023 - July 2023

- Led a comprehensive optimization initiative, **reducing unnecessary API calls by 43%** through advanced profiling techniques, significantly enhancing website efficiency and user experience.
- Leveraged Google Lighthouse audits to raise page **performance scores from 23 to 86**, demonstrating a commitment to technical excellence and industry best practices in web development.

Back-End Developer

- Developed an **OCR reader with 93% accuracy**, enabling students to effortlessly **convert handwritten notes into PDF files**, thereby enhancing accessibility and study efficiency.
- Implemented **Redis caching system** effectively, significantly **reducing database load** and **improving overall system performance**.
- Engineered **highly optimized APIs** that streamlined data retrieval and processing, resulting in notable **reductions in network response times** and enhancing the performance of the entire web application.

Full Stack Web Developer

O3 Infotech (Kelsa.io). Bangalore, India

Back-End Developer

July 2023 - Present

- Implemented **Single Table Inheritance (STI)** in a Ruby on Rails application to optimise data storage and retrieval by leveraging a single widgets table with a type discriminator, **reducing database complexity** while maintaining clear **object-oriented design**. consolidating Account and Pipeline widgets into a unified database structure.
- Developed a secure, **QR-based content-sharing** platform in Ruby on Rails with dynamic, admin-controlled QR codes, granular **session tracking** (device, location, IP), **real-time content expiration**, and enhanced **authentication using device**
- Optimised Elasticsearch** performance by designing intelligent indexing strategies, **reducing database load**, eliminating redundant data, and enabling fast, **efficient full-text search** across large datasets with minimal overhead.

Front-End Developer

- Developed a dynamic **React-Redux** architecture, implementing **DRY** principles to create modular, optimized code with advanced state management strategies for enhanced scalability and maintainability.
- Optimized performance using React hooks like **useCallback** and **advanced memoization** to reduce unnecessary re-renders, **improve API efficiency**, and enhance server and user performance.
- Designed intuitive, user-centric interfaces for clients like **Rakuten**, **Kurl-On**, and **Cycle**, translating complex business requirements into seamless, **dynamic frontend solutions**.