Abhishek Mahato

FullStack Software Developer

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SUMMARY

Full Stack Developer skilled in building scalable web apps using MERN, React 19, and microservices. Experienced in handling backend performance, real-time systems, and modern frontend architectures.

EDUCATION

Islington College, Bsc(Hons) Computing	09/2021 – 09/2024 Kathmandu, Nepal
Global College, SLC (+2)	04/2019 – 04/2021 Kathmandu, Nepal

PROFESSIONAL EXPERIENCE

Innovate Tech, *Software Developer*

10/2024 - Present | Kathmandu, Nepal

- Architected and maintained a system supporting **15M+** users across **10+** countries.
- Contributed to the development of a scalable Quiz platform, **Kung Fu Quiz**, integrated to **MST**.
- Reduced page load time by 45% by optimizing data fetching with React Query and Redis.
- Designed and established **mono-repo** architecture with shared libraries and CI-integrated workflows.
- Migrated legacy frontend from **Redux Saga** to **React Query** and **SCSS**, simplifying state management and enhancing user interface consistency.
- Developed MST-V2 using React 19, TypeScript, Tailwind CSS, RTK Query and a mono-repo setup for modernized scalability, maintainability, and rapid development.
- Engineered an advanced **Ebook Scribble** system using **WebRTC** to enable real-time writing, annotation, and communication between mobile devices and **MST TV**.
- Built functionality for synchronizing Ebook pages between mobile and TV with mobile-driven control, enhancing the learning experience.
- Enabled real-time resource sharing between MST TV and Scribble using socket.
- Implemented **Kafka** for event streaming, **Redis** for caching, and **Docker** for containerization to optimize backend performance.
- Conducted performance benchmarking and automated testing using Jest and Playwright.

Innovate Tech, FullStack Trainee

07/2024 - 09/2024 | Kathmandu, Nepal

- Contributed to the development of My Second Teacher and other platforms deployed in 8+ countries.
- Migrated react legacy code from Class Component to Functional Component.
- Ensured mobile responsiveness for seamless user experience across devices.

• Implemented MongoDB aggregation pipelines to deliver dynamic filtering, reporting, and analytics features.

Naxa Pvt Ltd., Frontend Trainee

01/2024 - 06/2024 | Kathmandu, Nepal

- Integrated interactive maps and geospatial data using **OpenLayers** and **Maplibre**, delivering seamless, real-time data visualization in web applications.
- Enhanced frontend state management by leveraging **React Query** and **Redux Toolkit**, streamlining data fetching, caching, and improving application responsiveness in geospatial platforms.
- Built reusable UI components using **Shadcn/ui** and practiced design flexibility with **Headless UI**.

Naxa Pvt Ltd., Frontend Intern

09/2023 - 12/2023 | Kathmandu, Nepal

- Applied Git for collaborative development and version control in a team environment.
- Explored React architecture and contributed to component-level development using Redux Toolkit.
- Participated in team discussions to understand scalable component patterns and frontend structuring.

SKILLS

Programming Languages

JavaScript, TypeScript, Python, Java, C#

Frontend

React.js (v19), Next.js, Redux, RTK Query, Zustand, Tailwind CSS, Shadcn/ui, SCSS, Material UI, Bootstrap

Backend

Node.js, Express.js, .NET, Koa.js, Apollo GraphQL, RESTful APIs, WebSockets, Kafka, gRPC

Databases

MongoDB, PostgreSQL, MySQL, Redis

Testing

Jest, Selenium, Cypress, Playwright

Dev Tools:

Git, GitHub, GitLab, Postman, Figma, Trello, Jira

PROJECTS

My Second Teacher, React.js, Node.js, MongoDB, PostGres, WebSocket, WebRTC, Redis, Kafka ☑

- Contributed to a multi-award-winning e-learning platform used across 51 countries, delivering scalable
- Contributed to the core Ebook Scribble system enabling real-time annotation and mobile-to-TV interactions.
- Engineered resource-sharing modules and interactive book controls for synchronized multi-device use.

Home School Asia, React.js, RTK Query, MongoDB ☑

- Developed a homeschooling platform for Cambridge IGCSE AS/A Level with features like interactive video lessons, testpapers, ebook and revised notes.
- Worked on implementing and optimizing payment models to support various subscription plans.
- Developed and integrated a notification system for real-time updates using email and in-app alerts.

Naxa Assessment, React.js, Redux Saga, Bootstrap ☑

- Developed a website aimed at preventing natural disasters by gathering data through questionnaires from affected areas.
- Implemented predictive analytics to forecast potential disasters based on collected data.
- Contributed to the design and implementation of user interfaces and data management systems.

Digital Metric Addressing System, React. Js, Openlayers, Maplibre, React Query ☑

- Designed and developed a digital addressing system tailored for municipal use, facilitating efficient tracking of households.
- Implemented features for data storage, retrieval, and visualization to enhance user experience.
- Worked closely with stakeholders to understand requirements and refine system functionalities.
- Conducted testing and debugging to ensure system reliability and performance.

LANGUAGES

English	• • • •	Nepali	• • • •
Hindi	• • • • •	Deutsch	• • • • •

KEY ACHIEVEMENTS

- Built and deployed a scalable system supporting 15M+ users in 10+ countries.
- Developed an interactive Ebook Scribble system using WebRTC & React.
- Migrated React legacy codebase from Redux Saga to RTK Query, improving maintainability.
- Improved backend performance by implementing Kafka + Redis caching layers.