St. John's, NL, Canada
+1 825-523-0654
dibyamagar5@gmail.com

DIBYA RANI SARU MAGAR

Fullstack Software Engineer

linkedin.com/in/dibyamagar56
github.com/dibyamgr
dibyarani.dev

Full stack software engineer with 5+ years building production web applications across logistics, energy, e-commerce, and maritime industries. Experienced developing enterprise-scale JavaScript(React.js,Next.js, Vue.js) platforms serving hundreds of companies and thousands of daily users, with hands-on backend experience in Node.js, Python (Flask, FastAPI), and database design (MongoDB, PostgreSQL, Redis). Strong track record designing intuitive user interfaces, implementing complex state management, architecting APIs, and collaborating with cross-functional teams to ship features end-to-end in high-impact, fast-paced environments. Recently completed Master's in Software Engineering from Memorial University. Committed to building reliable, scalable systems while maintaining clean code standards and continuously exploring emerging technologies to solve real-world problems.

TECHNICAL SKILLS

Languages: JavaScript ES6+, TypeScript, Python, HTML, CSS/SASS, GraphQL, C#, PHP

Frontend: React.js, Next.js, Redux, React Query, Tailwind CSS, Styled Components, HTML5 Canvas, Leaflet.js, three.js

Backend: Node.js, Express.js, Flask, FastAPI, RESTful APIs, WebSocket, Temporal, Microservices

Data: MongoDB, PostgreSQL, Redis, Timescale DB, SQL

DevOps, Tools & Cloud: Git, Docker, AWS (EC2, S3, SQS), GCP, CI/CD pipelines, Webpack, Vercel, Netlify

Design & Workflow: Figma, Adobe tools, Agile/Scrum, Code Reviews, Testing tools

PROFESSIONAL EXPERIENCE

Frontend Developer | Global Maritime

St. John's, NL, Canada | October 2025 – Present

- Building an interactive Deck Optimizer application for FPSO vessel management using HTML5 Canvas with real-time rendering of layouts, zones, and shipping containers
- Implementing drag-and-drop functionality with collision detection and zone validation to let users intuitively place containers across vessel decks
- Integrating Flask backend with the frontend canvas system for real-time data synchronization and server-side rendering using Jinja2 templates
- Creating modular UI components (control panels, modals, navigation bars) in vanilla JavaScript with React-style architecture for maintainability
- Adding Leaflet.js map integration for displaying vessel locations with zoom-based view switching between canvas and map modes

Software Engineering Intern | Angler Solutions

St. John's, NL, Canada | June 2025 – August 2025

- Designed and implemented support system and automated error reporting, integrating Jira Service Desk API to automatically generate support tickets from user submissions
- Built interactive heatmap comparison feature for energy model enabling users to visualize hourly wind speed and energy production across multiple sites with delta calculations to compare temporal patterns
- Developed comprehensive PDF report generation system with automated chart integration, CSV data export, and dual light/dark mode
- Created color scheme system supporting seamless light/dark mode transitions across all dashboard components with brand-aligned palettes ensuring strong contrast and readability
- Built automated simulation error reporting capturing input JSON from failed simulations and generating structured Jira tickets with relevant parameters for efficient debugging and resolution

Mid-Level Software Engineer | Portpro Technologies

US & Nepal | 2021 – 2024

- Built React.js and Next.js applications for transportation dashboards serving 500+ trucking companies with real-time fleet tracking, container management, and appointment scheduling
- Designed and implemented Node.js/Express microservices for terminal appointment automation, handling appointment requests, validations, and scheduling logic eliminating manual terminal booking processes, saving customers hours of administrative work weekly.

- Architected Node.js/Express APIs for container lifecycle management (creation, movement, delivery) and implemented WebSocket servers handling real-time GPS updates and container status changes for thousands of containers simultaneously
- Developed interactive maps with Leaflet.js for GPS tracking, geofencing, and route visualization processing thousands of location updates
- Added WebSocket communication for live fleet updates and notifications with minimal latency
- Collaborated on backend APIs using Node.js and Express.js, helping build microservices with proper error handling and validation
- Worked with MongoDB for data storage, Redis for caching, and Timescale DB for time-series data
- Led adoption of Temporal workflow technology for appointment scheduling, reducing conflicts by 60%
- Used AWS services (EC2, S3, SQS) and GCP for infrastructure, set up CI/CD pipelines with Docker
- Participated in daily standups, sprint planning, and retrospectives using Agile methodologies with Jira for tracking

Frontend Developer | Supreme IT Solutions

Nepal | 2020 – 2021

- Built multi-vendor e-commerce platforms using React.js with Next.js framework serving thousands of users
- Implemented Redux for state management across shopping cart, authentication, and order flows
- Worked with React Router, Jest for testing, Webpack for builds, and styling libraries like Material-UI and Tailwind CSS
- Translated Figma designs into production React code with attention to reusability and performance

Frontend Developer & UI/UX Designer | Diprung Technologies

Nepal | 2019 – 2020

- Designed and developed responsive web applications using Figma and Adobe XD for design work
- Optimized applications for performance across different devices and browsers
- Worked with stakeholders to gather requirements and iterate based on feedback

EDUCATION

Masc. Software Engineering | Memorial University of Newfoundland and Labrador

Sept 2024 – Dec 2025 | Final Semester

BSc. (Hons) Computer Science | Leeds Beckett University

2022 | First Class Honors

PEARSON BTEC Level 5 Higher National Diploma in Software Engineering

Distinction | Merit-Based Scholarship

KEY PROJECTS

MUN AI Assistant – RAG-Based Student Support Chatbot for University

- Graduate capstone project building an AI chatbot for Memorial University students using React, Nodejs, and PostgreSQL with pgvector
- Integrated Google Gemini 2.0 for natural language processing with RAG implementation for accurate, source-grounded responses
- Set up CI/CD pipelines using GitHub Actions and Docker, deployed to Vercel
- Worked in a team of students managing documentation, architecture diagrams, and technical reports

AI-Powered Voice E-commerce System

- Built a voice-activated shopping platform using **Next.js, React, Redux, Alan AI SDK, and Material-UI**, with features for product search, cart management, checkout, and responsive UI.

CERTIFICATIONS

- Professional Skills Development Program (PSDP), Memorial University
- JavaScript Complete Guide, Master React.js with AI: From Basics to Advanced Development, Udemy
- Introduction to DevOps Training (CI/CD, Containerization, Cloud)
- LSF Scholarship, 2012