

DIP CHAKRABORTY

Backend-Focused Full-Stack Software Engineer

@ connect@dipchakraborty.dev

📞 (+880) 17 142 617 87

🌐 dipchakraborty.dev

in dipcb05

🔗 dipcb05

FullStack Developer | FastAPI | Nodejs | Reactjs | PostgreSQL | MongoDB

5+ years of full-stack engineering experience building scalable backend systems and AI-powered platforms. Specialized in FastAPI, PostgreSQL, and real-time architectures. Designed scalable architecture, delivered production systems for enterprise clients including Robi, BRAC, and Yamaha, serving thousands of users with measurable impact on performance and cost. Comfortable working independently in async, remote environments across time zones.

PROFESSIONAL EXPERIENCE

Software Engineer

Preneur Lab Digital

📅 January 2023 – April 2026

📍 Hybrid

- Built a RAG-based customer support platform using FastAPI and PostgreSQL, integrating voice, video, sentiment-aware escalation, recommendation engine, and commerce workflows; served **2k+ daily users** and **10k+ interactions**, reducing response time from 30s to <5s and manual support effort by 70% for clients including **Robi**, **BRAC**, and **Yamaha**. Implemented knowledge retrieval over 5k+ documents, auto-resolving 65%+ queries and **reducing repeat requests by 50%**.
- Developed an IoT-powered RFID access control system using TALL stack with real-time device synchronization for **5k+ employees** at **BAT**. Implemented data pipelines and digital wallet integration, eliminating manual reconciliation, **maintaining 80% real-time synchronization reliability**, and **reducing operational costs by 25%**.
- Built an enterprise quotation and revenue governance platform using FastAPI, Next.js, and PostgreSQL, replacing manual spreadsheet workflows with a concurrency-safe computation engine, Redis-cached RBAC, and audit-compliant approval flows, **reducing recalculation errors by 60%**, **improving approval speed by 50%**, and enabling real-time revenue forecasting.
- Worked in a cross-functional team with async communication, independently delivering features.

Software Engineer

IftiSoft Ltd

📅 Jan 2021 – Dec 2022

📍 Dhaka

- Contributed to the productization of a WebRTC-based video conferencing platform using **Laravel** and **Vue.js**; implemented core features, improved system stability, and supported scalable prototyping, reducing iteration cycles by **30%** and accelerating go-to-market readiness by **25%**

SELECTED PROJECTS

Autonomous Navigation for Mars Rover

Built a GPS-denied autonomous navigation system for a Mars rover prototype using ROS on NVIDIA Jetson Xavier NX with depth-camera-based 3D mapping, visual odometry, and shortest-path planning with real-time obstacle avoidance, achieving 95%+ waypoint accuracy in real-world field trials.

Restify-PHP

An ultra-light, zero-dependency PHP micro-framework inspired by FastAPI, designed for rapid API development with built-in async support, multi-database helpers, and OpenAPI/Swagger docs generation.

EXPERTISE

- Frontend:** React, Vue, Alpine.js, Next.js
- Backend:** Node.js, FastAPI, Laravel
- Architecture:** Distributed Systems, Microservices, Concurrency
- Databases:** PostgreSQL, MySQL, MongoDB, Redis
- Platform:** AWS, GCP, Docker, GitHub Actions, Terraform, Ansible
- Security:** JWT, OAuth2, RBAC
- AI:** RAG, LLM, Computer Vision

VOLUNTEERING

UIU Robotics Club

President

📅 2020 – 2022

📍 Dhaka, Bangladesh

- Led a **100+ member** student organization, building skill development programs, mentoring projects, improving team performance by **30%+**
- Arranged national competitions and managed major projects with **5M+ BDT** budgets, overseeing technical decisions and institutional reporting

ACADEMICS

BSc, Computer Science & Engineering

United International University

📅 October 2017 – 2022

AWARDS

- University Rover Challenge'22: World Finalist
- Google Hashcode'19: Regional Finalist

RECOMMENDATIONS

Faizah Farzana

@ fzn.anj@gmail.com

📄 Sr. Software Engineer, Optimizely