Dhruba Kumar Agarwalla

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EDUCATION

National Institute of Technology, Silchar — Assam, India
Bachelor of Technology – Civil Engineering — *Aug 2024 – June 2028*

Little Flower School, Bongaigaon — Assam, India
Higher Secondary (CBSE); Percentage: 78% — *Aug 2021 – June 2023*

Holy Child School, Bijni — Assam, India
High School Leaving Certificate (SEBA); Percentage: 75% — *June 2021*

PROJECTS

Event Manager – NIT Silchar Platform — Full-Stack Development
Full-Stack Developer & AI-Orchestrated Developer — *2025*

- Built a full-scale event management platform for NIT Silchar with 75,000+ lines of AI-assisted code.
- Developed React 19 frontend with Firebase integration and Node.js + Express backend.
- Integrated QR-based attendance with Gmail API automation and real-time Google Sheets sync.
- Achieved zero downtime during peak traffic and optimized performance by 70%.
- **Tech Stack:** React 19, Node.js, Express.js, Firebase, Google APIs, Cloudinary, Prisma, SQLite3.

GitIQ – AI-Powered Repository Analysis — AI Systems Development
AI Systems Developer & Full-Stack Engineer — *2025*

- Built an AI-powered GitHub commit analyzer with 40,000+ lines and multi-AI integration.
- Enabled batch processing (0.12s) using Groq and Gemini with dynamic load balancing.
- Designed a 19-category classifier with automatic failover and real-time analytics.
- Developed data visualizations using Recharts for insight-rich dashboards.
- **Tech Stack:** Next.js 14, TypeScript, Groq AI, Google Gemini, Recharts, GitHub API, Tailwind CSS.

Portfolio Website with AI Chatbot — Frontend & AI Integration
Frontend Developer & AI Integration Specialist — *2025*

- Designed a modern portfolio site with integrated Groq-powered AI chatbot.
- Implemented cyberpunk UI, 3D project cards, and real-time GitHub project fetching.
- Integrated persistent AI memory using localStorage and intent-based chat.
- **Tech Stack:** React 18, TypeScript, Tailwind CSS, Framer Motion, GitHub API, Groq AI, Vercel.

SKILLS

- **AI-Orchestrated Development**: Augment IDE, Claude Sonnet 4, Prompt Engineering, AI Workflow Automation
- **AI/ML Integration**: Groq AI, Google Gemini, AI Chatbots, Multi-AI Architecture
- **Tools & Platforms**: Git, GitHub, Vercel, Prisma, Cloudinary, Google APIs, QR Systems
- **Learning Focus**: Data Structures & Algorithms, System Design, Machine Learning, GATE DA 2027
- **Soft Skills**: Problem Solving, Project Management, Public Speaking, Team Collaboration

HONORS & AWARDS

- 2nd Prize – CSS Hacks Hackathon, CS Dept., NIT Silchar (2024)
- AI-Orchestrated Code Pioneer – Built over 130,000 lines of production code with AI collaboration

OTHER INTERESTS & ACTIVITIES

- AI/ML Research – Learning and preparing for a Data Analytics GATE EXAM 2027
- Open Source – Active contributor with focus on AI-based full-stack projects
- Technical Writing – Passionate about documentation, guides, and dev knowledge sharing