PALLAV KUMAR

📞 +91-6200845646 | ✉ pallav.kumar22b@iiitg.ac.in | 🔗 Pallav Kumar
🐙 Pallav46 | </> LeetCode: PallavKumar6200 | 🌐 Portfolio

EDUCATION

Indian Institute of Information Technology Guwahati   May 2026
B.Tech in Computer Science and Engineering   *CGPA: 8.13/10.0*

WORK EXPERIENCE

The Tann Mann Gaadi – Wellness on Wheels   April 2025 – July 2025
Frontend Developer Intern   *Remote*
- Developed a responsive and accessible UI for the company's main landing page using React.js and Tailwind CSS.
- Integrated the frontend with RESTful APIs via Axios for dynamic content rendering and state management.
- Collaborated within an agile team to build and deploy core application features, using Git for version control.

TECHNICAL SKILLS

- **Languages:** Java (DSA), JavaScript (Web Development)
- **Backend:** Node.js (with Express), Nginx, Apache Kafka, REST APIs
- **Frontend:** React, Tailwind CSS, HTML, CSS
- **Databases:** MySQL, MongoDB, Redis
- **Tools & Platforms:** Git, Docker, AWS Lambda, VS Code, Postman
- **Core Concepts:** Data Structures, Algorithms, Object-Oriented Programming, Software Engineering, Database Management Systems, Operating Systems, Computer Networks, Machine Learning

PERSONAL PROJECTS

Cryuze | 🐙 | 🔗 | Node.js, MongoDB, React, Razorpay   April 2024 – July 2024
- Built a full-stack web app that connects customers with nearby service providers using browser geolocation (within a 1km radius).
- Integrated real-time chat using WebSockets for direct messaging and booking.
- Added secure online payments using the Razorpay API.

ProxyServer | 🐙 | Node.js, TypeScript   April 2025 – May 2025
- Architected and built a high-performance, scalable reverse proxy from scratch in Node.js, using a master-worker clustering model to efficiently handle high concurrency across multiple CPU cores.
- Implemented round-robin load balancing, rate limiting, and an in-memory caching mechanism.
- Designed a type-safe YAML configuration system with Zod for runtime-validated routing.

COLLABORATIVE PROJECTS

MoodScape | 🐙 | Node.js, Flask, Kafka, Redis, Nginx, PostgreSQL, PyTorch   January 2025 – April 2025
- Built a full-stack microservices-based application that detects user emotions in real-time using facial analysis and recommends music based on mood.
- Integrated a modified ResNet-based deep learning model with 50% dropout to improve emotion recognition accuracy and reduce overfitting.
- Used Kafka for communication between services, Redis for caching, and Nginx for routing requests efficiently.
- Implemented the Saga pattern to ensure consistent deletion of user data across microservices—including liked songs, playlists, and account information—when an account is removed.

POSITIONS OF RESPONSIBILITY

Coordinator, Programming Club   January 2024 – July 2024
IIIT Guwahati   *Mentored 200+ students through 8 coding workshops and 2 hackathons*

Team Head, Entropy Technical Fest   June 2024 – October 2024
IIIT Guwahati   *Led a 10-member team to design, develop, and launch the official festival website*

ACHIEVEMENTS

- Achieved a global rank of **242/15,000+** in CodeChef Starters 111 (June 2023).
- Earned **3-Star Coder** rating on CodeChef, demonstrating proficiency in competitive programming.
- Secured **1st Place** in the Debuggers Hackathon, showcasing strong problem-solving and teamwork skills.