KRISHNA KAMALAKAR PAIKINE | 22EE10036

B.Tech.(Hons.) in ELECTRICAL ENGINEERING

EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2026	B.TECH	IIT Kharagpur	6.11 / 10
2022	HSC	Dr. Babasaheb Ambedkar College, Deekshabhoomi Nagpur	78.33%
2020	SSC	Navjeevan Dnyaanpeeth English Medium School, Pusad	94.20%

INTERNSHIPS

Software Engineering Intern | FruitBowl Digital Media   [May'25 - Aug'25]

Project 1: *Built a unified architecture integrating backend, mobile, CRM, and multi AI-agent services for seamless operations*
- Designed the full-stack **system design** of **Django backend**, **React Native app**, and **Next.js CRM** into an unified, scalable ecosystem
- Deployed **containerized** infrastructure using **Kubernetes**, **Helm**, **Celery** + **Redis**, **AWS S3**, and **Terraform** for seamless orchestration
- Built secure **CI/CD pipelines**, enforcing **enterprise-grade coding** standards, and implemented **secrets** management for better **security**

Project 2: *Developed a multi-channel conversational agent to automate practitioner outreach and better customer engagement*
- Engineered an **AI-driven** automation agent integrating **LLMs** through **vLLM**, **LiveKit** framework, **Twilio SIP, RAG** and **WhatsApp APIs**
- **Automated** practitioner **outreach** and improved **customer query handling** through **agentic** workflows and **dynamic intent recognition**
- Implemented **real-time conversation** pipelines and **context-aware** conversational **routing** to enhance **outbound call** quality experience

Project 3: *Developed a Flexible Monolithic backend and implemented Analytics Advanced for Real-Time Business Intelligence*
- Integrated **PostHog** analytics with **Kubernetes**, enabling **real-time event tracking**, **funnel analysis**, and **insights** for **20+** modules
- Developed a **personalized notification system** using **Django signals** and **React Native hooks**, improving user engagement by **35%**
- Orchestrated an **AI-driven content generation pipeline** to deliver **personalized recommendations**, increasing session duration by **28%**

PROJECTS

FedEx Web-App | Inter-IIT Problem Statement   [Nov'24 - Dec'24]

- Built an interactive **Next.js + Three.js frontend**, enabling **3D cargo visualization** and improving **logistics** planning **efficiency** by **30%**
- Integrated a **FastAPI backend** with **real-time optimization**, reducing **processing delays** by **45%** and enhancing **data retrieval speed**
- Engineered advanced **3D rendering** with **React Three Fiber**, delivering smooth visualization and **priority-based package allocation**
- Designed a **responsive UI** with **Tailwind CSS** and **Framer Motion**, increasing **user engagement** by **25%** through seamless **animations**

Real-Time AI Voice Assistant with Graph Memory | Intern Project   [May'25 - Aug'25]

- Engineered a real-time **AI** voice assistant using **LiveKit**, enabling conversations and **seamless** in-app guidance with <**1s response** latency
- Designed modular agent services using **FastAPI**, integrating **Neo4j** graph memory for **context-aware** and personalized user interactions
- Built a **user-preference** service using **Neo4j**, analyzing interactions across 5 **cognitive** dimensions to deliver **real-time** recommendations
- Developed a **personalized** meditation generator with **voice** and **adaptive audio** composition, improving user **engagement** significantly

IntelliCV - Next-Gen AI CV Builder | Self-Project   [May'25 - Aug'25]

- Architected a **Flask backend** powering **Next.js** frontend with **OCR**, **live editing** and **secure** file processing using **MongoDB** for database
- Implemented **Zustand + React Query** for seamless **authentication, state management** and **real-time backend API synchronization**
- Developed an **animated UI/UX** using **Framer Motion**, **Lottie animations**, **scroll-type interactions**, and **glass-morphism** components
- Deployed a fully **responsive, performance-optimized frontend** on **Vercel**, ensuring **SEO readiness** and **GPU-accelerated** transitions

AWARDS AND ACHIEVEMENTS

- Secured a **1300+ Codeforces rating** with a **global rank of 433** in **Round 1003**, outperforming **30,000+ participants** (@kalki.kgp)
- Achieved 3rd position against 1000+ participants in **MetaCode**, a **competitive programming** event by COMPOSIT 2025 at **IIT Kharagpur**
- Achieved **2nd position** in a VR Game Development **Hackathon** organized by Promoteo, IIT Jodhpur, competing against **100+ participants**

COMPETITION/CONFERENCE

- Contributed to **IIT KGP** in achieving **Gold Medal** at **Inter-IIT Tech 13.0** as a development team member, showcasing technical expertise
- Implemented interactive dashboards using **Next.js and React Three Fiber**, driving the team to secure **overall gold** across 23 IITs.

SKILLS AND EXPERTISE

- **Programming and Structural Languages** : C | C++ | JavaScript | TypeScript | Python | C# | HTML | CSS | SQL | Flutter | Swift
- **Libraries and Frameworks** : React.js | Node.js | Express.js | Next.js | Tailwind CSS | GraphQL | Numpy | Pandas | TensorFlow
- **Software and Tools** : Git | GitHub | Docker | Firebase | Vercel | Apache Kafka | AWS | Azure | Cursor | Android Studio | X Code
- **Databases:** MongoDB | PostgreSQL | Neo4j | MySQL | SQLite | Redis | Firebase Firestore | Pinecone | Weaviate | Elasticsearch

POSITIONS OF RESPONSIBILITY

Game Dev and Content Head | Computer Graphics Society, TSG   [Jan'23 - Present]

- Led the game development team in various **hackathons**, representing IIT Kharagpur, and developed two fully functional games
- Organized a **3-day** Open IIT game development workshop with 100+ participants in collaboration with **Technology Students' Gymkhana**
- Coordinated guest lectures with industry experts and **alumni**, providing valuable learning and **career** opportunities for members
- Managed a team of **20 members**, overseeing project timelines, task assignments, and ensuring deliverables were met on **schedule**

COURSEWORK INFORMATION

- **Mathematics and Programming**: Probability and Statistics | Linear Algebra | Advanced Calculus | Programming and Data Structures
- **Core Electronics**: Analog Electronics | Network Theory | Digital Electronic Circuits | Signals and Systems | Electrical Machines
- **Online Courses**: Advanced Machine Learning (Coursera) | AWS Basics to Advanced (Udemy) | Google Data Analytics | IDM Data Science

!Self declared by the student, CDC could not verify the relevant documents