

AMARESH PARIDA

Full-Stack AI Engineer

+91-6294915441 / +971-529711439 | amresh.parida10000@gmail.com | <https://www.linkedin.com/in/amaresh-parida-190017159> | [GitHub](#)

EDUCATION

Master of Technology - Artificial Intelligence & Data Science Engineering, **Indian Institute of Technology**, Patna Jun 2023 - Jun 2025
Bachelor of Technology - Computer Science & Engineering, **Biju Patnaik University of Technology**, Bhubaneswar May 2017 - May 2021

TECHNICAL SKILLS

Programming Languages: Python, Node.js, PHP
Backend Frameworks & Real-time: Express.js, FastAPI, Laravel, WordPress, Socket.io, REST, GraphQL, SSE, Webhooks, Medusa.js, TypeScript
Frontend Frameworks & Libraries: React.js, Next.js, Electron.js, jQuery, Bootstrap, Tailwind CSS
DevOps & Cloud: AWS, Azure, Docker, GitHub Actions, GitLab, Kafka, SchemaRegistry (Avro/JSON), Redis, Cloudflare, Sentry, Grafana, Metabase
Machine Learning / AI: Scikit-learn, XGBoost, KMeans, PyTorch, Hugging Face, LangChain, LangGraph, RAG, OpenAI APIs, MCP, CLIP, QLoRA
Databases & Others: PostgreSQL, MySQL, MongoDB, SQLAlchemy, TypeORM, Vector DB, Tesseract, n8n, Playwright, BullMQ, AI Agents

PROFESSIONAL EXPERIENCE (7+ Years)

Senior Software Engineer, KGK Group | Dubai Jan 2024 - Dec 2025

- Architected a **microservices-based e-commerce platform** using **Node.js (Express.js) & Next.js**, with **ERP/CRM/inventory** integration powered by **Kafka - Connect, Streams, Schema Registry (Avro/JSON)**, enabling **99.9% real-time stock sync & 85%+ latency reduction**.
- Built **Machine Learning models** for **dynamic pricing, inventory optimization & QC pattern recognition** using **PyTorch, Scikit-learn, FastAPI & LLM workflows (LangChain, LangGraph)**, driving **\$5M+ monthly pricing decisions**, cutting pricing **turnaround time by 40%**.
- Built a **real-time bidding system** using **Socket.io & SSE (Server-Sent Events)**, delivering sub-second updates at **scale by +50%**.
- Built affiliate **REST APIs** for **500+ B2B partners** with **dynamic request/response schemas**, driving **3x onboarding** and global reach.
- Integrated **n8n workflows** across **orders, partner onboarding, & KYC**, using **Redis-backed async execution**, reducing ops by **60%+**.
- Developed **product recommendation** using **LangChain & vector embeddings**, driven by **behavioral signals** for **+15% conversion**.
- Managed CI/CD** on **GitLab, AWS, & Azure** using **Docker**, enabling **versioned deployments** and **cutting release interruptions by 95%**.

Backend Engineer, Lyca Digital Private Limited | Bengaluru Aug 2022 - Dec 2023

- Engineered and **scaled backend microservices** using **Docker** across **Node.js** with **TypeScript, FastAPI, and Laravel**, delivering **high-availability REST APIs & Webhooks** that powered multiple e-commerce and marketing platforms serving **500K+ active users**.
- Built **LLM (OpenAI APIs)** powered **backend services** for **content automation, intelligent search, and internal workflows** in **CRM**.
- Built a **React.js storefront** with integrated **Pixel & GTM analytics**, driving high-traffic discovery, search, and real-time checkout.
- Optimized **SQL databases, indexes, queries, and caching layers**, cutting **API latency** by up to **60% and ensuring data consistency**.
- Optimized **distributed microservices** using **Redis, BullMQ & event streaming**, achieving **3x throughput** and **zero-downtime** scaling.
- Implemented **scalable notification systems** with **async delivery and retries**, supporting **real-time alerts** across multiple channels.
- Built a **campaign platform** integrating **analytics pipelines (Pandas, Scikit-learn)** with **CRM dashboards**, improving **ROI by 25%**.

Software Engineer, Odisha Knowledge Corporation Limited | Bhubaneswar Sep 2021 - Aug 2022

- Built modular **full-stack systems** with **Python, Express.js, and React.js** for **government** and education platforms serving **100K+ users**.
- Developed **Electron.js** app, integrating **AES enc/dec** to ensure **secure content delivery** in **LMS** for **smart schools program** under **5T**.
- Integrated **third-party APIs** and **hybrid on-premise & cloud infrastructure** to enable scalable operations with **99.9% uptime**.
- Delivered **real-time data sync** between **LMS & analytics systems** on **MongoDB**, achieving **60% lower latency** and **50% better insights**.
- Built **secure AI-powered exam modules** with **real-time monitoring (OpenCV, TensorFlow)**, reducing **manual grading time by 80%**.
- Optimized **frontend data fetching** via **async, event-driven APIs & Redis caching** on **AWS**, cutting **peak-time page load latency by 40%**.

PROJECTS

AI-Powered Market Intelligence & Pricing Assistant | KGK Group

- Built a **full-stack GenAI platform** for **real-time pricing insights & recommendations** from market, **inventory, sales & competitors** data.
- Combined **classic ML** (regression, XGBoost, K-Means) with **GenAI workflows** via **LangChain, LangGraph, OpenAI & fine-tuned Llama**.
- Built **RAG pipelines** with embeddings & Pinecone, via **prompt engineering, conditional routing & tool calling** for explainable output.
- Automated ERP** pricing updates with **Kafka-driven pipelines** and built **Next.js dashboards** for **AI-assisted** decision support.
- Orchestrated AI workflows** using **n8n** with **scalable async execution**, handling model inference, persistence, notifications, & retries.

CERTIFICATIONS

Deep Learning Specialist, IBM | **AI & Natural Language Processing**, ISM Dhanbad | **Large Language Models**, H2O.ai University | **Training & Fine-Tuning LLMs**, Activeloop | **LLMOps**, Duke University | **Advanced Prompt Engineering**, upGrad | **Vector Databases**, Packt | **LangChain & LangGraph Spec.**, Packt | **n8n: AI Agent Builder**, Simplilearn | **Application of Generative AI for Project Managers**, Project Management Institute (PMI) | **Certified Ethical Hacker (CEH-Master)**, EC-Council | **JavaScript**, freeCodeCamp.org | **Model Context Protocol (MCP)**, Anthropic

ACHIEVEMENTS

- Patent (202521075438)** - Gesture-based touch-free interaction framework for digital media. 2025
- Alumni Member of the Innovation Cell, Ministry of Education**, Government Of India. 2021
- Smart India Hackathon (SIH) 2019** Finalist. 2019