

MRINALL SAMAL

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Bhubaneswar, Odisha, India

EDUCATION

Bachelor of Technology in Computer Science & Engineering

CGPA: 9.54/10

Siksha 'O' Anusandhan University, Bhubaneswar | 2023 – Present

WORK EXPERIENCE

Software Engineer Intern (AI/ML) – Wipro | Remote

Mar 2025 – Sep 2025

- Developed production-grade AI/ML pipelines for Fortune 500 clients; improved model accuracy by 15% via A/B testing using TensorFlow, PyTorch, and Apache Spark for predictive analytics and automation.
- Implemented scalable MLOps workflows with cross-functional teams for NLP and intelligent-systems products, applying best practices in model deployment and CI/CD.

PROJECTS

Amma Odisha – Civic Ward & Representative Mapping Platform

ammaodisha.me | [GitHub](#)

React.js, Node.js, MongoDB, Maps API, Admin Dashboard, Role-Based Auth

2025

- Built full-stack civic platform mapping Bhubaneswar's ward representatives and BMC data; actively used by **20,000+ citizens** for filing public issue reports with real-time tracking and role-based admin review workflows.
- Secured sponsorship to expand the platform across other districts of Odisha; rendered ward boundaries via Maps API with automated routing to municipal officials, shortening the citizen-to-authority response loop.

All-in-One College Management Platform

iters.live | [GitHub](#)

React.js, Node.js, Express.js, MongoDB, WebSocket, JWT, REST APIs, Cloud Deployment

2024

- Architected and deployed a college ecosystem serving **12,000+ active users** (6K students, 400 faculty, 100 admins) with modules for biometric attendance, PYQs, events, notes, and idea boards — replacing scattered WhatsApp groups with a single platform.
- Built 100K+ daily-API backend with WebSocket sync, RBAC, multi-tenant design (99.9% uptime); AI analytics cut admin overhead 60% and manual data entry 75%.

Blockchain-Based Traffic Challan System

[GitHub](#)

Solidity, Ethereum, Web3.js, React.js, Smart Contracts, GPS/Maps API

2024

- Designed a decentralised traffic-fine system on Ethereum with tamper-proof challan issuance, GPS tracking, smart-contract penalty calculations, and police/admin dashboards — saving **\$50K+ annually** and eliminating reconciliation errors.
- Integrated MetaMask/WalletConnect and audit-trail dashboards; comprehensive Solidity tests reduced processing time by 70%.

ASUS Armoury Crate for Linux – Hardware Control Utility

[GitHub](#)

C++, Linux Kernel Modules, ACPI/WMI Interfaces, System Programming

2024

- Reverse-engineered Windows drivers to build a native Linux alternative enabling RGB, fan, and performance-profile control for **10,000+ Linux users**; achieved 5-star GitHub ratings and 40% lower resource usage vs Windows.
- Implemented ACPI/WMI kernel interfaces and custom drivers for real-time thermal monitoring.

Hackathon Anti-Cheating Chrome Extension

[GitHub](#)

JavaScript, Chrome Extension APIs, WebRTC, AES-256, DOM Manipulation

2024

- Engineered browser-security extension blocking copy-paste, tab-switching, and fullscreen-exit violations; monitored **500+ concurrent participants** across 3 universities — achieving **85% cheating reduction** with AES-256 encrypted logging and real-time anomaly detection.

TECHNICAL SKILLS

Languages: Python, Java, C++, JavaScript (ES6+), TypeScript, SQL, Solidity, Bash/Shell

AI/ML & Data: TensorFlow, PyTorch, Scikit-learn, Keras, Pandas, NumPy, OpenCV, NLTK, spaCy, HuggingFace, NLP, Computer Vision, Model Deployment

Web & Backend: React.js, Next.js, Node.js, Express.js, REST/GraphQL APIs, Redux, Tailwind CSS, Socket.io, JWT Auth, OAuth 2.0

Cloud & DevOps: GCP (Diamond Ranked), Docker, Kubernetes, CI/CD, Jenkins, GitHub Actions, Vercel, Netlify, AWS (EC2, S3, Lambda), Nginx

Databases: MongoDB, PostgreSQL, MySQL, Redis, Firebase, Elasticsearch, Query Optimization

Blockchain & Tools: Ethereum, Solidity, Web3.js, Ethers.js, Hardhat, MetaMask | Git, Postman, VS Code, IntelliJ, Linux/Unix, Agile, TDD

AWARDS & ACHIEVEMENTS

- EY Business Case Competition** – Finalist among India's top teams nationwide (500+ elite teams) | Dec 2025
- MumbaiHacks 2025** – Finalist in India's largest hackathon; 1,000+ participants from IIT, NIT, BITS | Nov 2025
- National Geo AI Competition** – Rank 6 nationally out of 2,000+ participants organised by IIT Bombay | Dec 2024
- National Indian Hackathon** – 5th Position (500+ teams) | **Google Cloud: Diamond Ranked** (top 1% globally) | 2024
- India IGES & Adobe International Hackathon** – Selected Finalist in AI/ML sustainability & global competition pools | 2024

POSITIONS OF RESPONSIBILITY

Development Lead – Codex (University Coding Club) | codex-iter.in

Nov 2023 – Present

- Competitively selected from 1,000+ candidates; mentored **50+ junior developers**, led cross-functional projects, and established coding standards across full-stack, algorithms, and software-engineering tracks.
- Launched official club website covering 10+ events and portfolios — 95% user satisfaction, 5,000+ monthly visits, 120% YoY growth — establishing Codex as the university's premier tech community.