

Ayan Modak

Backend and Blockchain Developer



ayanmodak.info



Ayan-Blufy



Ayan



modakaryan11@email.com



8208390973

EXPERIENCE

EMERTECH INNOVATIONS | BACK END DEVELOPER

Jan 2023 – Current | Navi Mumbai, India

- **Developed High-Performance Backend Systems and Real-Time Applications:** Engineered and maintained scalable backend systems utilizing **Node.js, NestJS, Express, and Socket.IO**. Integrated with various databases to support **high-performance and real-time applications**.
- **Managed AWS Cloud Infrastructure and CI/CD:** Designed and administered **AWS cloud infrastructures**, focusing on efficient **server management, load balancing, and robust CI/CD pipelines** using **Nginx and Jenkins** to ensure seamless deployment and optimal scalability.
- **Delivered Blockchain-Enabled EUDR Compliance Solutions:** Spearheaded traceability projects for **Apollo Tyres and BKT Tyres**, providing blockchain solutions that ensured **EUDR compliance** and significantly enhanced **supply chain transparency**.
- **Managed Large-Scale Backend and Cloud Operations:** Contributed to backend and cloud operations for EUDR compliance, successfully handling **1M+ daily API requests**, integrating with complex **SAP systems**, and **managing production and QA deployments** to uphold **system reliability, scalability, and regulatory compliance**.

CRYPTICONIC SECURITY. | SOFTWARE DEVELOPER INTERN

dec 2021 – March 2022 | kolhapur, India.

- Developed responsive and dynamic web applications using **React.js, Next.js** and **Node.js**.
- Designed and implemented **REST APIs**, integrated with **MongoDB** for efficient data management.
- Performed web security assessments using **Burp Suite, Nmap, Wireshark, and SQLmap** to identify and resolve vulnerabilities before **VAPT (Vulnerability Assessment and Penetration Testing)**.

PROJECTS

G-TRACE | CONTROL UNION

2023

- Pioneered the development and implementation of a **blockchain-based product lifecycle tracking system** for cotton.
- The system guarantees **immutable data storage** and provides **real-time verification** of the cotton's journey.

HARIT WARI | BLOCKCHAIN TREE PLANTATION TRACKING

2025

- Led the creation of a **blockchain-based track-and-trace** module for tree plantations, enabling **transparent monitoring** and **successfully tracking** over **1.7 million trees**.
- **Improved server scalability (4+ req/min)** and **stabilized performance** under **high load using distributed instances**. Enhanced database efficiency with **indexing** and contributing to a **world record**

SKILLS

PROGRAMMING

LANGUAGES:

C++ • JavaScript • Python
Bash • TypeScript

FRAMEWORKS LIBRARIES:

NestJS • Express • Node.js

DATABASES:

MongoDB • PostgreSQL •
Neo4j • Redis • Dynamo Db

CLOUD INFRASTRUCTURE:

AWS • Docker • Linux • Nginx
Jenkins • Ansible • Terraform

TOOLS PRACTICES:

Git • CircleCI • PM2 • Grafana
• Prometheus

OTHER EXPERTISE:

SAP integration • Blockchain •
Burp Suite • Nmap • Wireshark
• SQLmap

EDUCATION

SANJAY GHODAWAT UNIVERSITY

B.TECH (COMPUTER SCIENCE AND
ENGINEERING)

July 2019 - June 2023 | Kolhapur, India

CGPA: 8.0

ACHIEVEMENTS

- **Evidence Management for Crime Branch.**
- **DMRV for Climate Change.**
- **Secure Certification for Rubber Board of India.**