

Sohini Banerjee

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SUMMARY

Motivated Computer Science Engineering undergraduate (GPA 8.59) with expertise in **Java, Python, and Full Stack Development**. Proven track record in architecting scalable microservices, deploying blockchain solutions, and building AI/ML models. Seeking a Software Development Internship to leverage skills in **Data Structures, Algorithms, and System Design**.

EDUCATION

Vellore Institute of Technology (VIT) <i>B.Tech in Computer Science and Engineering (AI & ML)</i>	Chennai, TN Jul. 2024 – Present
– CGPA: 8.73 / 10.0 – Coursework: Data Structures and Algorithms, Operating Systems, DBMS, Computer Networks, OOP.	

Delhi Public School <i>Senior Secondary (Class XII) - Science</i>	Kolkata, India Mar. 2022 – Mar. 2024
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EXPERIENCE

Software Development Intern <i>Hackfinity</i>	Jun. 2024 – Aug. 2024 Chennai, India
– Developed and deployed responsive web interfaces using React.js and JavaScript , reducing page load time by 25% . – Collaborated with the backend team to integrate RESTful APIs , ensuring seamless data fetching for 1000+ daily users. – Fixed critical bugs in the frontend codebase and documented technical specifications to support future development.	

PROJECTS

PRISM Protocol <i>Java, Python, Spring Boot, Blockchain, OpenCV</i>	Oct. 2024
– Designed a decentralized identity system using Spring Boot microservices and FastAPI for deepfake detection. – Implemented real-time liveness detection using OpenCV , preventing AI replay attacks with 99% accuracy. – Deployed Smart Contracts on Polygon blockchain using Solidity to issue Soulbound Tokens (SBTs) for identity verification.	

Genesis - AI Code Synthesis <i>Python, Machine Learning, Matplotlib</i>	Sep. 2024
– Built a Genetic Programming engine in Python that automatically generates code algorithms by evolving Abstract Syntax Trees. – Optimized memory usage by 40% using Adaptive Mutation logic and visualized fitness trends using Matplotlib . – Achieved 100% convergence on symbolic regression tasks, demonstrating advanced algorithmic problem-solving.	

Network Intrusion Detection System <i>Python, Scikit-Learn, Pandas</i>	Aug. 2024
– Developed a security model using Random Forest and SVM classifiers to detect network attacks (DoS, Probe). – Processed raw network traffic logs using Pandas and SMOTE for data balancing, achieving 99.2% accuracy . – Reduced false positive rates to under 0.5% by optimizing feature selection algorithms.	

TECHNICAL SKILLS

Languages: Java, Python, C++, JavaScript, SQL, HTML/CSS, Solidity
Frameworks: React, Spring Boot, FastAPI, Node.js, Scikit-Learn, TensorFlow
Tools & Platforms: Git, GitHub, Docker, Linux, VS Code, MySQL, Postman
Core Concepts: Data Structures, Algorithms, DBMS, OOP, System Design, SDLC