Prathmesh Sonawane

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Education

Vishwakarma Institute of Technology, Pune Bachelor of Technology in Information Technology

Aug 2022 - May 2026 CGPA: 7.9/10.0

Experience

Software Engineer Intern | Canspirit AI

Sept 2024 – Apr 2025

- Spearheaded development of 5 AI applications that served 500+ daily users, and accelerated processing time by 60 percent.
- Engineered ETL pipelines that processed 10GB+ daily data and CI/CD workflows across 15+ microservices, and improved deployment frequency by 40 percent.

Technical Skills

Languages: Python, C, JavaScript, SQL, R, Solidity, HTML5, CSS.

Frameworks: React.js, Flask, Django, FastAPI, Next.js.

Databases: DynamoDB, MongoDB, SQLite, MySQL, PostgreSQL.

Cloud: Google Cloud Platform, AWS (S3, DynamoDB).

Tools: Docker, Kubernetes, Git, Tableau, Linux, Selenium, OpenCV, YOLOv5.

Specializations: Machine Learning, AI, Blockchain, Computer Vision, DevOps.

Projects

DocManager [Link]

Flask, AWS S3, DynamoDB, Solidity, AES

May 2025

- Architected a cloud-based system that handled 100+ concurrent users with AES encryption and blockchain verification, and achieved 99.9 percent security compliance.
- Integrated Aho-Corasick and Bloom Filter algorithms, delivered sub-200ms responses, and optimized search time by 70 percent across 100+ documents.
- Established Merkle Root verification processing with 100 percent traceability.

Safe Assessment Chain [Link]

Blockchain, Computer Vision, Ethereum, Solidity

Nov 2024

- Launched a secure examination platform that was awarded best project among 100 submissions, and prevented **95** percent of academic malpractices.
- Developed 8 smart contracts that automated 200+ concurrent examinations, and enhanced scalability by 300 percent with provisional patent filed.

Vahanparikshak [Link]

Machine Learning, MongoDB, Firebase, Python

Nov 2023

- Deployed an AI-powered system with Smart City Pune and RTO Pune that processed 200+ daily trial verifications.
- Executed ML models that achieved 98.5 percent accuracy, and streamlined verification time by 75 percent, and ranked top 5 at SIH 2.0 among 500+ teams.

Awards and Achievements

- Secured third place in CTF Hackathon 2025 (100 + teams).

Research and Publications

teams).

- Ranked top 5 in Smart India Hackathon 2.0.
- Grand Finalist in PICT TechFista 2024 (150+ Ranked top 10 in National Techathon 2024.
 - Finalist in Innerve Hackathon 2024.
- Authored "Expressive Canvas: Emotion Detection in Interactive Art" in Springer Nature LNNS Series [Link].
- Featured "WaveFilter: Marine Microplastic Monitoring" (79.8 percent precision) in IEEE InCACCT-2025 [Link].
- Presented "Real-Time License Verification via Face Recognition" in IEEE Xplore [Link].
- Contributed "Air Quality Prediction Model" (99 percent accuracy) to IEEE Preprints [Link].