

HEMANT SANJAY PATIL

Java Developer | Machine Learning Engineer | Computer Vision Specialist

+91-9172010257 • hemantpatil17072004@gmail.com • Pune, Maharashtra

LeetCode: Top 15% (500+) • GitHub: 15+ Repos • LinkedIn

SUMMARY

Computer Vision Engineer with 4+ years of production AI experience. Specialized in facial recognition and real-time systems. Key achievements: 95%+ accuracy in 3 ML deployments, 40% latency reduction, \$18K annual cost savings. AWS/GCP certified.

TECHNICAL SKILLS

- **Machine Learning:** PyTorch, TensorFlow, CNN, LSTM, Transfer Learning, OpenCV, Dlib
- **Data Engineering:** Apache Spark, Kafka, ETL/ELT
- **Programming:** Python (NumPy, Pandas), SQL, Java, Spark SQL
- **Databases:** MySQL (query optimization), PostgreSQL, BigQuery
- **Framework:** SpringBoot, RestAPI

PROFESSIONAL EXPERIENCE

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| Technical Lead
TEDxDYPITPimpri, Pune, India | Jan 2024–Present |
| <ul style="list-style-type: none">• Architected AWS infrastructure for 700+ users with 100% uptime using auto-scaling• Developed Node.js registration system increasing sign-ups 30% (1,500+ users)• Optimized MySQL queries reducing latency 20% through composite indexing• Automated CI/CD pipelines cutting deployment time from 45 to 15 minutes | |

KEY PROJECTS

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|--|-------------------|
| Real-time Emotion Recognition | Jul 2024–Feb 2025 |
| <ul style="list-style-type: none">• 92% accuracy (20% improvement) with CNN-LSTM model on 36K+ image dataset• 60% precision boost via MTCNN liveness detection integration• Maintained 0.7s latency at 100+ concurrent users using Docker | |
| Biometric Attendance System | Jan 2025–Jun 2025 |
| <ul style="list-style-type: none">• 95% recognition accuracy automating attendance for 100+ students• 90% reduction in administrative errors through ERP integration• Achieved 400ms response at 40+ users via NumPy optimization | |
| Big Data Cleansing Framework | Jan 2025–Jun 2025 |
| <ul style="list-style-type: none">• Processed 4M+ daily records with 50% error reduction• Accelerated ETL jobs 25% through Spark partition optimization• Saved \$18K/year by eliminating manual validation processes | |

EDUCATION

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| B.E. Computer Engineering
Dr. D. Y. Patil Institute of Technology, Pune | 2021–2025
CGPA:8.22/10 |
| <ul style="list-style-type: none">• Thesis: "Edge-Optimized Video Processing" (IEEE published) | |
| Leadership: Vice President, Neki Club Nashik(2020-2022) | |
| <ul style="list-style-type: none">• Managed 18 community initiatives reaching 600+ residents• Secured \$25K funding through corporate partnerships | |