

Ashutosh Bhagwat

Pune, India | mr.ashutoshbhagwat@gmail.com | 9175559790 | yourwebsite.com | [In](#)

PROFILE

Senior AI Engineer with 4.7+ years of experience building and scaling production-grade AI systems across edge devices, backend infrastructure, and analytics platforms. Progressed from Intern to Team Lead at an early-stage startup, contributing directly to growth from a 2-member team to 10+ engineers while owning end-to-end AI systems.

Led deployment of large-scale Computer Vision platforms across 13,000+ edge devices, supporting analytics for 10,000+ ATMs and 2,000+ retail stores. Delivered reliable, cost-efficient systems across multi-region deployments spanning India, Indonesia, South Africa, Zambia, Nigeria, Saudi Arabia, Jordan, Guatemala, Burkina Faso, Sri Lanka, and more.

Education

Government College of Engineering and Research

Pune, India

Jun 2018 – Jul 2022

▷ Bachelor of Engineering in Electronics and Telecommunication, CGPA 8.88 (First Class with Distinction)

• Coursework: Signal and System, Artificial Intelligence, MicroControllers, DSA, Image Processing

• Projects: Construct-o-Bot, Mastering 3D Blender, Smart Home Automation, 3D Volumetric Estimation

• Achievements: Air-3 in e-Yantra IIT Bombay Competition, Campus Ambassador, Led 12+ member team for Competition

Work Experience

Tarsyer Insights LLP

Pune, India

Jun 2021 – Present

▷ (Intern → AI Solution Engineer → Senior AI Engineer) | Team Lead

• Owned end-to-end AI solution delivery: problem understanding → solution design → data collection & model development → edge deployment → secure ingestion → databases → dashboards → real-time alerts

• Deployed real-time Computer Vision analytics for compliance monitoring, customer behavior analysis, and operational intelligence across enterprise environments

• Designed and maintained data pipelines and databases (MySQL, MongoDB) powering real-time enterprise dashboards for trends, KPIs, and system health

• Implemented real-time monitoring and alerting systems to prevent data loss and ensure operational reliability across distributed deployments

• Optimized deep learning models for resource-constrained edge hardware, achieving 40 FPS on 2GB RAM, 75% model compression, and 120ms → 35ms inference latency

• Designed and operated hybrid Cloud + On-Prem infrastructure for secure, high-throughput communication across globally deployed edge systems

• Built Tarsyer VPN, a Nebula-based P2P orchestration platform, enabling secure remote access and bandwidth-efficient communication for distributed devices

• Delivered high-accuracy OCR systems for high-speed industrial conveyor belts and machine odometers under variable lighting conditions

• Built CPU-based auto-labeling tools using SAM, reducing annotation effort by 80% and accelerating model iteration cycles

• Led a 10+ member engineering team, owning client onboarding, deployment workflows, and post-deployment operations

Fortune3D

Pune, India

Jan 2021 – Jul 2021

▷ 3D Modeling and Prototyping | Core Member

• Owned end-to-end 3D prototyping for client projects, delivering production-ready assets for early-stage product validation

• Enabled faster product iteration by supporting B2C and C2C use cases with custom 3D design solutions

eYantra IIT Bombay

Mumbai, India

Aug 2020 – Jul 2020

▷ Robotics Intern | Team Member

• Ranked 3rd nationally in IIT Bombay's e-Yantra program by delivering a fully autonomous robotics system

• Contributed to open-source robotics education by developing instructional content using Blender for multi-domain applications

Project & Business Impact

- Enabled data-driven decision-making by converting large-scale edge telemetry into real-time dashboards and operational KPIs
- Reduced infrastructure costs by ~\$3K/year by designing and deploying a P2P VPN architecture, minimizing centralized bandwidth usage
- Achieved ~9× operational efficiency by building a one-click diagnostics system, cutting health checks from ~15 min to ~2 min
- Built an AI-driven media optimization system using camera-based analytics; demonstrated via live enterprise client demos
- Delivered award-winning AI solutions: Catapult 4.0 (Winner), Retacon (Winner), Maruti Suzuki Innovation Lab (Top 7)
- Ensured production reliability at scale by designing fault-tolerant monitoring and alerting across 13K+ live edge deployments

Technologies & Skills

AI & CV: TensorFlow, PyTorch, YOLO, OpenCV, NCNN, SAM, ML flow, AWS (SageMaker), Object Detection & Tracking

Edge & Infra: Raspberry Pi, NVIDIA Jetson, Qualcomm, Docker, Kubernetes, CUDA, CI/CD, Git, GitHub Actions

Data & Backend: FastAPI, Flask, REST APIs, MySQL, MongoDB, Redis, Looker, Power BI, Tableau, Metabase, Zoho, Streamlit

Systems & Security: GCP, Azure, P2P Networking, Nebula VPN, Secure Client-Server Communication, Remote Device Orchestration

Leadership: Technical Ownership, People Management, Systems Thinking, Operational Execution, Ambiguity Handling