

# Karneeshkar V

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[Portfolio](#) | [Terminal portfolio](#)

## PROFESSIONAL SUMMARY

Innovative engineer specializing in AI development. Experienced in fine-tuning LLMs like LLaMA 3.1 and deploying scalable applications using Python, FastAPI, and Cloud. Proven ability to build practical AI solutions, from sentiment analysis bots to smart deterrent systems with 94% accuracy. Seeking to apply a comprehensive skill set in AI, and cloud to solve challenging problems.

## TECHNICAL SKILLS

**Languages:** Python, Bash, Go, SQL, C/C++

**AI & Data:** PyTorch, TensorFlow, Computer Vision, Sensor Data Processing

**Web & Cloud:** Fast API, Node.js, REST APIs, llama.cpp, AWS, Docker, Git

**Databases:** PostgreSQL, SQLite, MongoDB

**Soft skills:** Communication, Teamwork, Active listening, Problem solving, Critical thinking, Time management

## EXPERIENCE

### Tech Lead

Jun 2025 – Current

*2Cents Capital*

*Bengaluru, India*

- Led and scaled cross-functional Mobile and AI teams (10+ engineers) to deliver high-impact features with 95% on-time release rate.
- Published a fully responsive investment application on both iOS App Store and Google Play, achieving <0.5s cold-start time.
- Designed and deployed AI agents across the end-to-end customer journey—including customer support, onboarding, and market research—improving support resolution speed by 40% and reducing manual intervention costs by 30%.

### Software Developer

Jan 2025 – Jun 2025

*Visteon*

*Chennai, India*

- Created diagnostic routines for JLR platforms that detect system anomalies with 96% accuracy, boosting vehicle reliability.
- Optimized real-time dashboard software (SomeIP on QNX/Linux) in C, reducing processing latency by 25%.
- Wrote unit and functional tests to reach 99.8% code coverage across the code-base with zero deviations.

### Automation Intern

Dec 2024 – Jan 2025

*Procter & Gamble*

*Hyderabad, India*

- Implemented IIoT monitoring on five production lines, ingesting 2M+ data points daily with 99.9% uptime.
- Automated quality-control workflows, cutting manual inspection time 40% and improving defect detection 15%.

### IoT & LoRaWAN Developer

May 2024 – Jun 2024

*Tynatech Ingenious Pvt Ltd*

*Noida, India*

- Built RESTful APIs / webhooks connecting 50+ LoRaWAN devices to cloud platforms.
- Optimized UART-LoRaWAN interface to raise throughput 30% via efficient buffer management.
- Added MQTT streaming for real-time gateway visualisation, handling 100+ msgs s<sup>-1</sup>.

### Web Development Intern

Oct 2023 – Dec 2023

*Intellect Design Arena*

*Chennai, India*

- Developed PHP-based financial portals with 30% faster page loads.
- Managed cloud infra for five web apps, configuring auto-scaling for 99.9% availability.
- Created analytics dashboards delivering real-time engagement and conversion insights.

### R&D Intern

Aug 2023 – Sep 2023

*Hindustan Aeronautics Ltd (HAL)*

*Bangalore, India*

- Optimised autopilot algorithms, cutting computational overhead 22% while meeting safety constraints.
- Authored C++ simulation tool covering 200+ control-system test scenarios.
- Assisted avionics teams with system documentation and verification protocols.

## PROJECTS

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- Full Stack AI Peronal Assistant** | *Go, Google A2A, PostgreSQL, React* Dec 2024
- Engineered and deployed a cloud-based bot to centralize and automate digital life management.
  - Implemented asynchronous agents to streamline and optimize complex Google Workspace operations.
  - Developed a personalized knowledge graph to deliver tailored assistance and enhance user experience.
- LLaMA 3.1 Fine-Tuning for Code Reasoning** | *Python, RL (GPRO), Hugging Face* Apr 2025
- Fine-tuned LLaMA-3.1 8B on a paired-coding dataset (link) using a single H100 to enhance code-reasoning ability .
  - Applied GPRO reinforcement learning using Gemma 3 as a reward model, inspired by DeepSeek-R1.
  - Improved Coding capabillityes by 15 % in custom benchmark and avgergage of 10% in popular coding benchmark
- Instagram Automation Bot** | *Python, FastAPI, Redis, AWS* Dec 2024
- Deployed cloud bot handling 1000+ daily interactions with 99.5% uptime.
  - Added sentiment analysis via fine-tuned LLMs achieving 88% intent-classification accuracy.
  - Designed Redis cache reducing Meta Graph API calls 65%; responses 500 ms.
- Multipurpose VR Gloves with Gesture Recognition** | *Unity, C#, ESP32, ML* Sep 2024
- Built VR gloves capturing 15+ gestures at 92% accuracy using flex-sensor ML pipelines.
  - Developed web UI for mapping gestures to 20+ system commands; integrated Unity for gaming/assistive control.
- Embedded Athlete-Performance Monitoring System** | *ESP32, PyTorch, OpenCV* Mar 2024
- Ran edge CV on ESP32 to analyse runner form in real-time; fused MPU6050, VO<sub>2</sub>, temperature data.
  - Implemented decision-tree classifier for actionable feedback via Flask / Plotly dashboard.
- Smart Rhesus Macaque Deterrent System** | *Jetson Nano, CV, Ultrasonic* Mar 2024
- Achieved 94% macaque detection in varied lighting; ultrasonic emitters cut intrusions 90%.
  - Computer vision based detection system with a accuracy of 93.2% .

## EDUCATION

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- Vellore Institute of Technology** Chennai, India  
*B.Tech. Electronics & Computer Engineering; GPA: 8.66/10* 2021 – 2025