

DHIRANESH K M

dhiranesh2017@gmail.com | 8610240900 |

[LinkedIn](#) | GitHub



Profile

B.Tech candidate specializing in Artificial Intelligence and Data Science with hands-on experience in full-stack development and computer vision. Proven track record in developing real-time AI systems, including umpire action recognition and edge-deployed LLMs. Deeply focused on scalable software architecture, agentic AI, and high-performance algorithmic problem solving.

Education

K. S. Rangasamy College of Technology, B.Tech Artificial Intelligence and Data Science Sept 2023 – May 2027

- **Coursework:** Machine Learning, Operating Systems, Computer Vision, Data Structures & Algorithm.
- CGPA: 7.78 (till 5th semester)

Internship

Research & Development Intern – iGrad AI Labs | Sep 2025 – Nov 2025

- Worked on a cricket-based umpire action recognition and highlight generation system, applying deep learning, pose estimation, and computer vision techniques with advanced LSTM.
- Gained hands-on experience in real-time AI development and collaborative engineering workflows while working on live projects with the technical team.

Projects

1. Umpire Action Recognition & Highlight Generation System (ECN):

- Build Real-time AI system that detects umpire actions and auto-generates cricket match highlights using pose estimation, tracking, and temporal modeling.
- Reduced model size from 1.2GB to 340MB using 4-bit quantization.

2. Tournament Management Web Application web : [Cricket Tournament](#)

- Local-first tournament platform with public pages and admin control for teams, matches, points, and logistics, supporting automatic bracket progression and optional real-time sync.

3. AI Research Assistant & Universal PDF Summarizer:

- AI-powered assistant for OCR-based PDF summarization and research content extraction.

4. TeamSync Pro – Role-Based Collaboration Platform:

- Role-based team collaboration web app with dashboards, approvals, and real-time coordination.

5 Attendance Management System using QR Code:

- Developed and successfully deployed a QR-based attendance management system for a college event, optimizing real-time scanning and validation to ensure fast, accurate, and reliable student check-ins.

Research & Ongoing Work

JAN 2026-PRESENT

- Optimized large language models for deployment on resource-constrained edge devices by applying quantization and parameter-efficient fine-tuning techniques.
- Developed a real-time video analysis agent capable of adaptive decision-making with minimal manual retraining.
- Designed a modular agentic AI framework integrating vision, memory, and reasoning components for autonomous edge applications.

Skill

Programming: Python, Java, C, C++ (OOP, scripting, DSA)

Web: HTML5, CSS3, JavaScript, Angular, Git, GitHub

AI / ML: TensorFlow, PyTorch, Computer Vision

Coding profile: [Link](#)

Certificate:

- **Linear Algebra for Machine Learning and Data Science**- DeepLearning.AI
- **Machine Learning for All**- University of London

[Certificates-LINK](#)