

# Atharv Ganesh Katyarmal

Portfolio - [atharv.katyarmal@gmail.com](mailto:atharv.katyarmal@gmail.com) - +91-8929373136 - [LinkedIn](#) - [GitHub](#)

## Experience

**Research Intern** | *ISFCR*

*Jan 2026 – Present*

**Software Development Engineer Intern** | *Datacove.ai*

*June 2025 – July 2025*

- Integrated and worked with existing agentic AI API to process legal and recruitment documents for real-time analysis and compliance checks.
- Built backend workflows using agentic AI API outputs to organize and streamline document handling, reducing manual effort.
- Published technical blogs on the company website and created internal documentation explaining system workflows and agentic AI API usage in legal and recruitment domains.

## Research Paper and Publication

**CheatGuard:A Distributed Multi-Modal Anti-Cheating System for Hybrid Examinations using Custom Trained Models with a Real-Time Alert Dashboard**

*To be presented at 20th INDIACom 13th International Conference on Computing for Sustainable Global Development, Delhi, 8 April 2026*

- Built a distributed AI proctoring system using MediaPipe gaze tracking and YOLOv8 object detection, achieving **93.3% gaze** and **95.5% object detection accuracy** in real-time hybrid exams.
- Developed a dataset of **2,500+ annotated samples** and trained a YOLOv8-based CNN deep learning model, achieving **84.2% mAP** for automated detection of exam-related violations.
- Developed a rule-based decision engine with **5-minute temporal windowing** and a Flask REST API, enabling low-latency edge processing, interpretable violation scoring, and scalable privacy-preserving monitoring.

## Projects

**Distributed Logging System** | *Apache Kafka, Elasticsearch, Fluentd* | [Github](#)

- Architected a distributed logging pipeline across 2 VMs using a producer-consumer model, achieving real-time stream processing, fault tolerance, **99% log delivery reliability**, and **<100ms latency** for monitoring and alerting.
- Implemented log ingestion with Apache Kafka, indexed storage and search with **Elasticsearch**, and log aggregation with **Fluentd**, along with heartbeat-based monitoring for automated service health alerts.

**Lambda Serverless** | *Docker, Python, JavaScript, Streamlit, gVisor* | [Github](#)

- Developed a serverless execution environment for Python and JavaScript functions with FastAPI, Docker, and gVisor, achieving **<200ms cold start latency**.
- Integrated request routing, container pre-warming, and execution time/resource constraints for secure, scalable function execution and built a **real-time dashboard** to monitor function metrics such as response time, error rate, and resource usage.

**Gradopia** | *React.js, Node.js, MySQL, Express.js* | [Github](#)

- Developed a social networking platform using React.js with dynamic components and state management, and Node.js/Express.js REST APIs for user interactions and content sharing.
- Designed relational schemas in MySQL for follower relationships, search queries, and job postings, enabling referral-based opportunities and efficient placement workflows.

## Skills

- Languages:** C++, C, Python, JavaScript, SQL, HTML, CSS, Go
- Frameworks:** React.js, Node.js
- Developer Tools & Platforms:** Linux, Docker, Git, GitHub, Postman, Elasticsearch, Apache Kafka, Fluentd, MySQL Workbench
- Libraries:** YOLOv8, NumPy, Pandas, Redux

## Achievements

- 2nd Place**, In-house Kaggle ML Hackathon
- LeetCode: **400+ problems solved** | [Profile](#)
- 98 Percentile** in MHT-CET and **Under 4,000 Rank** in COMEDK
- 3x** recipient of Distinction Award
- 2nd Rank** in SOF ICSO, International Computer Science Olympiad, 7th Grade, School Level

## Education

**PES UNIVERSITY, Bengaluru**

*B.Tech in Computer Science and Engineering*

*Sep 2022 – Expected 2026*

**GPA: 7.88**

**NARAYANA OLYMPIAD SCHOOL, Bengaluru**

*Senior Secondary*

*May 2020 – May 2022*

**SCC: 90.6%**