Aathil **Nishad**

Computer Science Undergraduate

About me

Motivated Computer Science undergrad at PES University with hands-on experience in machine learning. Seeking an opportunity to apply system-level thinking and problem-solving in real-world environments.

Personal

Aathil Nishad
Nationality: Indian

Core Skills

Python (Intermediate)
C (Basic-Intermediate)
Java (Basics)
MySQL
Machine Learning (Basics)
Deep Learning
Frontend Development (HTML/CSS/JS)
Data Structures & Algorithms
Git
Cloud Basics

Languages

English (Proficient)
Malayalam (Native)
Hindi (Intermediate)

Contact

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github.com/Achlys2004
7012144190

Experience

June 2025 – Aug 2025 **Frontend Developer**
PESU Venture Labs · Bengaluru

- Engineered user-facing features that streamlined internal workflow communication, leading to a significant improvement in operational efficiency.
- Liaised with cross-functional design and backend engineering teams to implement highly responsive and scalable user interfaces.
- Addressed and resolved critical front-end bugs while implementing performance optimizations that enhanced application responsiveness and stability.

Education

2022–2026 **BTech in Computer Science**
PES University · Bengaluru
GPA: 8.16/10 2020–2022 **Computer Science Stream**

Narayana E-Techno High School · Bengaluru
Grade : 90%

Certifications

Problem Solving (Basic) **2024**
HackerRank

PCEP – Entry-Level Python Programmer **2024**
Python Institute

Projects

Capstone: Electric Grid Safety Enhancement using Deep Learning
LSTM,Forecasting, Reinforcement Learning ·

- Architected a predictive safety system for electric grids, leveraging an LSTM Autoencoder to accurately forecast potential faults and enhance grid reliability.
- Implemented a Reinforcement Learning agent to dynamically adjust fault detection thresholds, significantly reducing false positives and improving detection accuracy.

Kube-9: A Distributed Systems Cluster Simulation Framework
Python, Docker, Streamlit ·

- Architected a distributed cluster simulation using Docker to containerize master/worker nodes, incorporating a heartbeat mechanism for real-time health monitoring.
- Engineered a pod deployment and lifecycle management system, supporting custom configurations, persistent volume mounts, and efficient node-based tracking.
- Developed an interactive Streamlit dashboard for real-time cluster state visualization and implemented automated recovery protocols for failed nodes and pods to ensure high availability.

Non-Invasive Online Proctor
Python, Go, Machine Learning ·

- Engineered a lightweight client in Go to non-intrusively monitor user activity and system events within a simulated online examination environment.
- Designed a Python-based AI module, utilizing an LSTM network for real-time behavioral analysis to accurately identify and flag potential academic integrity violations.
- Architected an event-driven pipeline to efficiently stream client-side data to the AI analysis module and persistent logging services.

Yet Another Distributed Task Queue (YADTQ)
Big Data, Kafka, Redis ·

- Developed a scalable, distributed task scheduler utilizing Kafka for reliable message brokering and Redis for high-performance state management.
- Implemented a dynamic scheduling algorithm that allocates tasks based on real-time worker availability, optimizing for load balancing and resource utilization.
- Engineered a robust fault-tolerance mechanism, featuring heartbeat-based failure detection and automated task reallocation to guarantee operational continuity.

Restaurant Management System
Python, MySQL ·

- Engineered a comprehensive, full-stack restaurant management system using Python and MySQL to automate and streamline core operational tasks.
- Designed and integrated core modules for table reservations, order processing, and automated billing to enhance service efficiency.
- Developed an intuitive command-line interface (CLI) and a reporting module to generate operational insights, aiding in management decision-making.

Awards

2022–2025 Distinction Award — Semesters: 1, 2, 5 and 6 (PES University)