Nitish Kumar Yarlagadda

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Education

University of Minnesota - Twin Cities   Anticipated December 2025
Major: B.S. Computer Science, Minor: Management of Technology   *Minneapolis, MN*
- **GPA**: 3.800/4.00
- **Honors**: Dean's List (Spring 2023, Fall 2023, Spring 2024, Fall 2024) - College of Science and Engineering
- **Courses**: Software Engineering, Applied Machine Learning, Machine Learning Fundamentals, Recommender Systems, Architecture of Database Management Systems, Data Structures & Algorithms, Operating Systems, Introduction to Artificial Intelligence

Technical Skills

Languages: C, C++, C #, Python, Java, JavaScript, HTML, CSS, SQL, Assembly x86-64
Technologies/Frameworks: FastAPI, OpenCV, TensorFlow, Scikit-learn, Numpy, Pandas, PySpark, PyTorch, YOLO, .NET, Streamlit, Pydantic Logfire, Node.js, Express, SQL Server, PostgreSQL, AWS, GitHub, Docker
Tools: Git, Jira, Instructor, Amazon SageMaker AI
Operating Systems: Windows, Mac, Linux

Experience

Software Engineering Intern   May 2024 – July 2024
Kairos Technologies   *Hyderabad, India*
- Implemented REST APIs using .NET ASP Web API, resulting in a 25% improvement in performance by optimizing data transmission and enhancing application architecture for faster response times.
- Created an incident detection system utilizing Large Language Model (LLM) for object detection and interpretation in the live stream video context of an incident, enhancing the accuracy and speed of the incident response using YOLO by processing 40 frames per second.
- Collaborated with team members to implement OpenCV library to optimize the performance and increase the detection accuracy of the image and video frames uploaded into the system.
- Integrated the system with GPT-4o for data analysis and retrieving detailed reports for every 50 frames about the incident type, severity, and recommended actions.

Information Technology Intern   May 2023 – Aug 2023
Coca Cola   *Bangalore, India*
- Learned deployment and management of automated bots on Microsoft Azure, taking on the role of monitoring their performance through the Pimpam application. Ensured continuous bot operations by identifying and resolving any issues, optimizing their functionality for maximum efficiency.
- Executed the functions of reporting and transactional bots, focusing on their data extraction.
- Achieved a thorough understanding of virtualization, including the effective allocation of hardware resources to align seamlessly with software utilization patterns.

Undergraduate Teaching Assistant   Jan 2024 – Present
College of Science and Engineering   *Minneapolis, MN*
- Assisted over 295 students in the area of Machine Architecture and Organization, explaining fundamental and complex concepts related to machine-level programs.
- Conducted weekly lab sessions and held office hours to provide one-on-one tutoring to help students understand concepts and debug coding assignments.
- Graded and reviewed over 250+ assignments including labs, projects, and exams helping students with positive feedback to improve their understanding and performance.

Projects

Payroll Management System   Jan 2021 – May 2022
- Designed and implemented a Python program to facilitate and manage employee information, department, salaries, and, incentives efficiently within an organization reducing an administrative overhead by 25%.

Drone Delivery System   Jan 2024 – May 2024
- Worked on designing an extension to the foundational drone delivery system leveraging design patterns by the addition of data collection which features the ability to track data from a 3D simulation in a CSV file using singleton pattern to get insights on the business perspective.