Yashwanth Raj Tirupati

SUMMARY

Highly skilled full-stack engineer with 2+ years of experience in Java and modern front-end frameworks, seeking to leverage expertise in developing and optimizing scalable applications. Proven ability to translate user requirements into robust, high-performance solutions, improving API response times and system reliability. Eager to contribute to a fast-paced team environment, collaborating effectively on complex projects and adhering to best practices.

EDUCATION

University of Dayton

Dayton, Ohio, USA

M.S. in Computer Science

Aug 2023 - May 2025

- Concentrations: Autonomous Systems and Data Science
- **GPA**: 3.41/4.00
- Related Coursework: Data Structures & Algorithms, Objects & Design, Virtual Reality, Machine Learning, Artificial Intelligence, Object-Oriented Programming, Algorithm Design, Advanced Computer Vision.

Jawaharlal Nehru Technological University

Hyderabad, Telangana, India

B. Tech. in Computer Science & Engineering

June 2018 - July 2022

• CGPA: 7.3/10.00

• Related Coursework: Operating Systems, Database Management Systems, Computer Networks, Discrete Mathematics, Web Technologies, Software Engineering.

EXPERIENCE

Cognizant Technology Solutions

Chennai, Tamil Nadu, India

Software Developer

March 2023 - Aug 2023

- Developed and deployed full-stack features for enterprise systems using Spring Boot (Java) and modern front-end frameworks, resulting in extensible and maintainable code.
- Collaborated in an Agile team to deliver robust solutions, improving API response times by 15% and exceeding stakeholder expectations.

Cognizant Technology Solutions

Chennai, Tamil Nadu, India

Programmer Analyst Intern

March 2022-Sept 2022

- Identified and resolved bugs in enterprise applications, reducing reported issues by 10% for key modules.
- Improved code quality and reliability by authoring technical documentation and enhancing test automation.

PROJECTS

Scalable E-commerce Platform using Java and React

Jan 2024-May 2025

- Developed a high-performance e-commerce platform using Java (Spring Boot), Node. is, and React, supporting 10,000 concurrent users with j200ms average response time.
- Implemented RESTful APIs and microservices architecture for improved scalability and maintainability, resulting in a 30% reduction in infrastructure costs.
- Integrated with a SQL database and implemented robust caching mechanisms for enhanced performance and user

Real-time Hand Tracking & Gesture Recognition for AR

Jan 2024-May 2025

- Developed a deep learning model (C++, PyTorch) for high-fidelity hand tracking in a simulated AR environment, achieving 98.5% accuracy on a 50-gesture dataset.
- Engineered a lightweight architecture, reducing latency by 30% and increasing model robustness by 25% to enable 90 FPS on-device performance.

Microservices-based Streaming Service

Sep 2023-Dec 2023

- Designed and implemented a microservices-based streaming service using Node.js and a NoSQL database, handling 500 concurrent streams with minimal latency.
- Developed robust API endpoints using RESTful principles for seamless integration with other systems, resulting in a 20% increase in user engagement.

ACTIVITIES AND LEADERSHIP

University of Dayton

Dayton, Ohio, USA

• Teaching Assitant, CPS 501 (Advanced Programming and Data Structures)

Jan 2024-Apr 2024

• Secretary, Indian Student Association (100+ members)

Aug 2023-Apr 2024

SKILLS

Languages: Python, Java, C++, C, JavaScript, Kotlin Frontend: HTML, CSS, ReactJS, AJAX Backend Frameworks: SpringBoot, NodeJS

Database: MySQL, MongoDB, Postgres
Automation: Appium, Selenium, Cucumber BDD, Jenkins, JUnit
AI & ML: PyTorch, TensorFlow, Jupyter, OpenCV, LLMs(GPT)