Yashwanth Raj Tirupati

SUMMARY

Highly proficient Software Engineer with 2+ years of experience in full-stack development and deep learning model deployment. Expertise in Java, Python, and Agile methodologies. Proven ability to design, develop, and debug complex software systems, optimize performance, and mentor junior team members. Seeking to leverage skills in a challenging and collaborative environment at Fortra.

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 5 full-stack features for enterprise systems using Spring Boot (Java) and modern front-end frameworks, resulting in extensible, maintainable, high-quality code.
- Collaborated with product stakeholders and an Agile team, translating user requirements into technical specifications and improving API response times by 15%.

Cognizant Technology Solutions

Chennai, Tamil Nadu, India

Programmer Analyst Intern

March 2022-Sept 2022

- Identified and resolved 100+ bugs in enterprise applications, decreasing reported issues by 10% for key modules.
- Improved code quality and reliability by authoring technical documentation and enhancing test automation.

PROJECTS

Real-time Hand Tracking & Gesture Recognition for AR

Jan 2024-May 2025

- Developed a deep learning model (C++, PyTorch) achieving 98.5% accuracy on a custom dataset (50 gestures).
- Reduced latency by 30% and increased model robustness by 25%, enabling 90 FPS on-device performance.

Enterprise-Grade Secure Application Development

Jun 2024 - Present

- Designed and implemented a secure, scalable application using Java, Spring Boot, and PostgreSQL, integrating with AWS services.
- Successfully deployed the application to a Kubernetes cluster, achieving 99.9% uptime and handling 10,000+ concurrent users.

Automated System Monitoring and Alerting

Sep 2023-Dec 2023

- Developed a Python-based system for monitoring critical infrastructure metrics, automating alerts, and reducing downtime by 20%.
- Integrated with existing logging systems and implemented advanced alerting mechanisms to proactively address system issues.

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)