Yashwanth Raj Tirupati

(937)-469-9700 tyashwanth99@gmail.com linkedin.com/in/yashwanthtirupati github.com/proxiee

SUMMARY

Results-oriented Software Engineer proficient in C++ and Qt, with a proven track record of debugging and troubleshooting system software anomalies. Experienced in developing and deploying tools for manufacturing and field support, utilizing automated testing (e.g., Squish) and object-oriented programming principles to deliver high-quality, efficient solutions.

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, ensuring extensible, maintainable, high-quality code.
- Collaborated with stakeholders to translate user requirements into technical specifications within an Agile environment, improving API response times by 15%.

Cognizant Technology Solutions **Chennai, Tamil Nadu, India**

Programmer Analyst Intern *March 2022-Sept 2022*

- Improved enterprise application stability by identifying and resolving bugs, resulting in a 10% reduction in reported issues.
- Enhanced code quality and reliability by authoring technical documentation and augmenting test automation.

PROJECTS

Automated Testing Framework for Manufacturing Diagnostics *Jan 2024-May 2025*

- Developed a Qt (C++) and QML-based framework for automated testing of manufacturing equipment, reducing testing time by 20% and improving diagnostic accuracy by 15%.
- Implemented unit and functional tests using Squish, resulting in a 10% decrease in post-release bugs.
- Successfully classified and categorized 500+ software anomalies, leading to improved troubleshooting efficiency.

Qt-based Diagnostics Tool for Field Support *Jun 2024 - Present*

- Designed and implemented a Qt (C++) application for field technicians to diagnose and troubleshoot system issues remotely, reducing onsite support calls by 25%.
- Integrated the tool with a central database to collect diagnostic data, improving issue resolution time by 18%.
- Utilized object-oriented programming principles to build a modular and maintainable application.

Improved System Anomaly Classification Algorithm *Sep 2023-Dec 2023*

- Developed a machine learning model to classify system anomalies with 95% accuracy, improving troubleshooting efficiency.
- The algorithm processed 1000+ daily logs and reduced false-positive alerts by 30%.
- Improved the accuracy of anomaly classification by 10% compared to the previous system.

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)