## Yashwanth Raj Tirupati

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Hiring Manager

Subject: Application for Software Engineer 2

Dear Hiring Manager,

I am writing to express my keen interest in the Software Engineer 2 position. My background as a results-driven Software Engineer with an M.S. in Computer Science aligns perfectly with the requirements outlined in the job description. My expertise in developing and deploying high-quality, maintainable software, particularly using Java, Python, and C++, makes me a strong candidate for this role.

My experience at Cognizant Technology Solutions further solidified my skills in full-stack development and Agile methodologies. During my time as a Software Developer, I developed and deployed 5 full-stack features for enterprise systems using Spring Boot (Java) and modern front-end frameworks, resulting in extensible and maintainable code. Furthermore, my collaboration with stakeholders to translate user requirements into technical specifications improved API response times by 15%. As a Programmer Analyst Intern, I identified and resolved 100+ bugs, resulting in a 10% reduction in reported issues. I also improved code quality and reliability through technical documentation and enhanced test automation.

My personal projects demonstrate my commitment to continuous learning and innovation. In my "Real-time Hand Tracking Gesture Recognition for AR" project, I developed a deep learning model (C++, PyTorch) achieving 98.5% accuracy on a dataset of 50 complex gestures. Through architectural engineering and data augmentation, I reduced latency by 30% and increased model robustness by 25%, achieving 90 FPS on-device performance. My work on "Enterprise-Level Software System Enhancement" resulted in a 20% reduction in processing time and a 15% decrease in resource consumption by refactoring core components. I also implemented a new monitoring system that reduced error rates by 10%, facilitating proactive issue resolution. Finally, my "Automated Code Quality Improvement System" identified and flagged 80% of common code quality issues, saving 10 hours per week in manual review time and reducing bug occurrences by 5% after integration into the CI/CD pipeline.

These achievements showcase my proficiency in software development, problem-solving, and my dedication to enhancing code quality and system performance—all crucial aspects of the Software Engineer 2 role. My resume provides further details on my qualifications and accomplishments. I am confident I possess the technical skills and collaborative spirit to make significant contributions to your team. Thank you for your time and consideration. I look forward to hearing from you soon.

Sincerely, Yashwanth Raj Tirupati