



1.800.333.1566

1.270.753.2150

info@its-training.com



120 Max Hurt Drive • Murray, KY 42071



Position Description

Lead Software Engineer

Reports to: Software Engineering Team Lead

Position Summary

The Lead Software Engineer is an individual contributor role in our engineering organization, combining deep technical expertise with strategic thinking. This position drives engineering excellence across multiple teams through technical leadership, architectural vision, and influential collaboration—without direct management responsibilities.

Core Competencies

- A. *Technical Leadership* – Strategic technical decision-making and architecture
- B. *Innovation & Technology Adoption* – Evaluating and integrating emerging technologies and AI capabilities
- C. *Collaboration & Communication* – Cross-functional partnership and stakeholder management
- D. *Team Impact* – Building engineering culture and enabling team success
- E. *Mentorship & Growth* – Developing senior engineers and driving continuous learning

Key Responsibilities

1. *Technical Leadership & Strategy*
 - Drive department-level technical decisions and influence product strategy through technical insights
 - Develop and maintain technical roadmaps aligned with business objectives
 - Lead major technical initiatives with cross-team impact
 - Guide architectural direction and conduct technical reviews across multiple teams
 - Shape engineering culture, standards, and best practices
 - Improve system architecture, reliability, and performance at scale
 - Manage technical debt strategically and implement efficient development processes
 - Lead evaluation and adoption of emerging technologies, including AI/ML capabilities that enhance product value and team productivity
2. *Modern Development Practices & AI Integration*
 - Champion the adoption of AI-assisted development tools (e.g., Claude Code) to accelerate delivery and code quality
 - Design and implement AI-powered features within our platform to enhance user experience and operational efficiency



1.800.333.1566

1.270.753.2150

info@its-training.com



120 Max Hurt Drive • Murray, KY 42071



- Evaluate and integrate emerging AI technologies that enhance product capabilities and competitive positioning
- Guide the team in leveraging AI tools effectively while maintaining code ownership, quality standards, and security requirements
- Stay current with AI/ML developments relevant to the ITS industry

3. *Collaboration & Communication*

- Partner with product management to align technical and business strategy
- Communicate complex technical concepts effectively to all stakeholders
- Build strong relationships across product, business, and engineering teams
- Lead customer-facing technical discussions and manage expectations for major initiatives
- Present technical roadmaps and architecture decisions to executive leadership

4. *Team Impact & Mentorship*

- Mentor senior engineers in advanced technical skills and leadership capabilities
- Establish and promote operational best practices across the department
- Create learning opportunities and knowledge-sharing initiatives
- Foster innovation, accountability, and continuous improvement
- Stay current with industry trends and emerging technologies

Education & Experience

- Bachelor's degree in computer science, information systems, or related field
- 6+ years of progressive software engineering experience
- At least 2 years in senior or lead technical roles with proven track record of leading major initiatives
- Deep knowledge of system architecture, design patterns, and distributed systems
- Expert understanding of scalability, high-availability design, and operational excellence
- Strong focus on reliability, observability, and performance optimization
- Expertise across multiple domains within the technology stack
- Experience with AI/ML integration or AI-assisted development workflows
- Demonstrated ability to evaluate and adopt emerging technologies pragmatically
- Open-minded approach to leveraging AI tools for enhanced productivity and innovation
- Ability to evaluate technical tradeoffs considering business impact
- Ability to translate customer needs into technical solutions
- Experience guiding architectural decisions based on business strategy and market dynamics
- Track record of aligning technical investments with business outcomes



1.800.333.1566
1.270.753.2150

info@its-training.com

120 Max Hurt Drive • Murray, KY 42071



Success Indicators

1. Successful delivery of major technical initiatives on time and within scope
2. Measurable improvements in system reliability, performance, and scalability
3. Positive stakeholder feedback on technical leadership and communication
4. Team growth through mentorship and knowledge sharing
5. Adoption of best practices and improved engineering standards across teams
6. Demonstrated leadership in modernizing development practices

This job description does not restrict management's right to assign or reassign duties and responsibilities at any time.