

Who we are:

Transportation is so basic that many of us overlook its overwhelming importance in our daily lives. Practically everything used in our homes, offices, or schools across Tennessee – from furniture to food items to clothing – requires a large and complex transportation network. The Tennessee Department of Transportation provides citizens of Tennessee and travelers with one of the best transportation systems in the country. TDOT is a multimodal agency with responsibilities in building and maintaining roads, aviation, public transit, waterways, railroads, cycling and walking. Our involvement ranges from airport improvements to funding transit buses to planning for river ports. The Department of Transportation has approximately 3,500 employees with four statewide region facilities in Knoxville, Chattanooga, Nashville, and Jackson.



Software Developer – Jr.

Information Technology Division – Product Lifecycle Services Section

Nashville, TN

Salary: \$60,600 - \$75,720 annually

Job Overview

The Software Developer – Jr. supports the design, development, testing, deployment, documentation, and maintenance of internal TDOT software applications. This position works in an Agile development environment, collaborating with project teams to deliver high-quality software solutions that align with the Product Development Section's strategic vision.

The Software Developer - Jr. will contribute to application enhancements, learn deployment pipelines, and participate in peer code reviews to ensure best practices and maintainability. In addition to technical contributions, this role involves active participation in Agile ceremonies, clear communication with product owners and team members, and adherence to TDOT's software development standards. This position reports to the Product Development IT Manager – Senior.

Essential Job Responsibilities

Develop and maintain software applications, leveraging TDOT's technical stack standards and project methodologies.

Implement unit testing frameworks to ensure software quality, integrity, and maintainability. Engage in peer code reviews and collaborative programming to improve development quality and knowledge sharing.

Collaborate with product owners, business analysts, and senior developers to clarify technical requirements and align with business needs. Provide regular updates on project progress, risks, and delays to ensure accountability and transparency.

Follow TDOT's software development lifecycle guidelines and coding standards to ensure consistency across projects. Maintain clear technical documentation, deployment guides, and change logs for system maintenance and upgrades.

Participate in Agile development activities, including sprint planning, stand-up meetings, and retrospectives.

Assess and refine skills to create timeframe projections for individual tasks. Ensure all core duties as a TDOT employee are completed and self-manage assigned

commitments. Engage in professional development, technical training, and mentorship opportunities to enhance expertise.

Stay informed on emerging technologies and industry trends to contribute to TDOT's IT innovation efforts.

Provide exceptional customer service to both internal and external customers, exercising effective listening skills, providing prompt responses, maintaining complete and accurate documentation, and communicating effectively.

Qualifications

Education and Experience: Graduation from an accredited college or university with a bachelor's degree and one year of professional level experience in systems analysis, application design, or software development of business information systems.

OR

Substitution of a Specific Associate's Degree for the Required Bachelor's Degree: Graduation from an accredited college or university with an Information Technology related associate's degree may substitute for the required bachelor's degree.

OR

Substitution of Experience for the Specific Associate's Degree: Professional level experience in the following area may substitute for the required Information Technology associate's degree on a year-for-year basis to a maximum substitution of two years: systems analysis, application design, or software development of business information systems.

OR

Substitution of Graduate Coursework for the Required Experience: Any additional graduate coursework in software development may substitute for the required experience on a year for year basis to a maximum substitution of one year.

OR

One year of experience as an Information Systems Associate, in training for software development with the State of Tennessee.

Required Technical Skills:

- C# and .NET
- Object-Oriented Programming
- Relational Databases
- Basic Data Structures (example: Arrays, Lists, and Dictionaries)
- Web technologies (example: HTML, JavaScript, and CSS)

Additional Skills Desired:

- MVC Design Patterns
- ASP.NET, ASP.NET Core, or other server-side API frameworks
- Team Foundation Services

- Angular v19+, or other client-side JavaScript frameworks
- Material Design or other CSS frameworks
- Unit Testing (front-end with Jasmine/Karma, back-end with MSTest, xUnit, or comparable)
- Version Control with Git
- Exposure to Microsoft Azure is beneficial

Ideal Candidate

The Software Developer – Jr. is a curious, motivated problem-solver who thrives in a collaborative Agile environment and is eager to learn. They demonstrate strong communication skills, attention to detail, and a proactive approach to challenges. With a resourceful mindset, they adapt quickly to new technologies and embrace continuous improvement. They value feedback, take ownership of their work, and uphold teamwork, integrity, and innovation in software development.