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| **REQUISITION REQUEST** |
| **Position Information** |
| **Department: PTG – PAVE – M&I - GM** | **Job Title (common name for job posting):** **General Middleware – Junior Embedded Software Engineer** |

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| **Position Requirements** |
| **POSITION SUMMARY/BASIC FUNCTION: (Brief statement indicating why the role exists and its function. )** |
| We are currently seeking a Junior Embedded Software Engineer to join our Agricultural and construction Product Development organization. As a Precision and Vehicle Electronics Organization team member, the Embedded Software Engineer will support the introduction of a new Services Oriented Architecture Middleware with a structured software architecture. They will assist lead software engineers and will be responsible for the design, development, testing and maintenance of new software features, software specifications, as well as supporting the software/system integration.The Junior Embedded Software Engineer will work in continuous coordination with other global team members, with other departments, with suppliers and with other project stakeholders following SAFe process. |
| **RESPONSIBILITIES: ( Outline the primary responsibilities of the position and the authority level of the position (i.e., budget approval) )** |
| * Work cohesively as a member of a development team, collaborating as needed with other members of the team with the end goal of maximizing quality and delivering on schedule.
* Develop core software features that are scalable, portable, and maintainable which allows for easier transitions to new and different hardware platforms.
* Writing C++ software code, embedded programs, and system protocols in Linux environment
* Implementing effective repairs, modifications, and upgrades to the embedded code.
* Follow established corporate and project-level Software Development Processes, ensuring consistency of development standards.
* Participate in peer design and code reviews to ensure the best design and detect/resolve software bugs early in the development process.
* Participate in problem resolutions of software issues utilizing industry known best practices.
* Provide issue recommendations and helps oversee supplier corrective actions, traveling to supplier sites as needed to facilitate communication between engineering and suppliers.
* Author SW specifications
* Design automatic Unit Test
* Troubleshoot and resolve any system issues. Understand control systems, sub-systems, and component requirements of all systems. Lead verification and validation planning, as well as compliance assessment and reporting. Manage all documentation, change control, and traceability.
* Use CI/CD systems (such as Gerrit, Jernkins, Jfrog), bug tracking systems (such as Polarion, Jira) and adhere to the policies and practices followed by other software engineers across various teams.
* Participate to requirements analysis activities and provide inputs to software development teams.
* Work in tandem with system engineers to design the software functionality in detail.
* Establish test procedures and systems for inspection of software.
* Maintain and communicate software development status and risk to management and stakeholders.
* Assist in the creation of project status reports and provides frequent progress updates to direct supervisor and relevant project managers.
* Travel, as necessary, to supplier facilities, test facilities, and customer field sites to gather data, resolve problems and explore software design alternatives.
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| **JOB REQUIREMENTS: (Describe the basic requirements of the position)**  |
| **Required Qualifications:** * BS Degree in Computer Science, Computer Engineering or similar
* Minimum 2 years of embedded software development on Linux
* C/C++ programming, GIT
* Familiar with SonarQube or equivalent tool for Static Analysis
* Knowledge of Internet related networking and application protocols: TCP/IP, Ethernet, MQTT, XMPP, DDS etc..
* Experience in vehicle applications including CAN communication
* English language level: advanced
* Travel up to 10% of the time both domestic and international

**Preferred Qualifications:** * MS Degree in Computer Science Engineering/Electronics/Telecommunication Engineering
* Expertise in Over The Air update solutions (RedBend, MENDER)
* Knowledge of QT framework
* Knowledge of SW cyber security principles
* Knowledge of automotive or industrial machinery
* Automotive embedded software experience
* Automotive System Architecture (AUTOSAR, AGL, etc…) experience
* Knowledge of Agile process
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