**POSITION DESCRIPTION**

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| **Position Title:** Senior Software Engineer | **Direct Manager:** Software Team Lead |
| **Budget Responsibility:** Nil | **Direct Reports:** Nil | **Indirect Reports:** Nil |

**WHAT YOU’RE HERE TO ACHIEVE**

**Key purpose:** As a member of the Gallagher Animal Management Product and Technology team, the Senior Software Engineer’s focus is the design, development, and maintenance of software & systems. Additionally, the senior software engineer will collaborate with and assist other members of the team.

**WHERE you’LL FIT in #teamgallagher**

**WHO YOU’LL BE WORKING WITH**

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| **internal relationships** | **external relationships** |
| Project team, Project Manager, Business Analysts, other Software Engineers, Test Analysts, Product Managers, Technical Support | Some interaction with external customers, Technical Account Managers |

**WHAT YOU’LL BE DOING**

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| **Key Accountability** | **Outcomes/ Expectations** |
| **Technical Expertise** | * Develop assigned software components using appropriate languages and tools.
* Break down tasks into their constituent parts and estimate the amount of work involved in completing tasks.
* Complete assigned tasks within a reasonable time frame.
* Provide software support to existing product.
* Lead designs and code reviews.
	+ Contribute to technical design approaches that meet the functional, cost and quality requirements.
	+ Clearly articulate problems and propose solutions, along with corresponding advantages and disadvantages.
	+ Use diagrams to convey key software structural and behavioral characteristics when appropriate.
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| **Quality** | * Adhere to agreed coding standards and practices, such as code reviews, automated testing, and unit tests.
* Produce high-quality software components with a low defect rate.
* Lead/manage defect investigations which result in prompt problem resolution.
* Take ownership of the quality of individual output.
* Continuously improve the quality of the product.
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| **Process** | * Follow and provide input to the internal software development process for your project(s) as specified by your Project Manager/Team Leader.
* Ensure tasks are kept updated and are completed in a timely manner.
* Work effectively and efficiently within the team environment to help ensure the successful achievement of project goals.
* Takes initiative to collect information needed for designing solutions and checks in during the development process.
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| **Continuous improvement** | * Stay up to date with trends and developments relevant to the position.
* Be proactive in developing and continuously improving knowledge and skills.
* Take responsibility for your own learning and development through a process of assessment, reflection, and taking action.
* Learn to influence and improve other team members in design and development domains.
* Identify areas for future improvement.
* Contribute to the learning of others on the team.
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Including any other duties not specified that may be required to complete the role, and as requested by the Reporting Manager.

**HOW YOU’LL BE DOING IT**

**Qualifications and / or Experience:**

* Significant commercial development experience.
* (Preferable) A relevant tertiary qualification in Technology.
* Has been an active contributor to a project in a collaborative team environment.

**Skills / Competencies:**

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| **Common** | * Proficient in Git and related processes.
* Developer testing via unit tests, automated integration scripts and with software testing tools.
* Proficient at designing and documenting features or modules that are a part of a product or project.
* Proficient in use of complier / development environments.
* Working with CI/CD pipelines.
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| **Embedded** | Proficient in:* Embedded C/C++.
* Debugging with and without JTAG.
* Use of oscilloscope and logic analyzers.
* Developing ISRs.

Significant knowledge of:* Digital electronics and schematics.
* Microprocessor architecture (timers, communications e.g. UART, SPI, PWM, resource management e.g. flash and RAM).
* (Preferred) Experience working in safety standard compliant software.
* (Optional) Experience with RTOS and / or embedded OS.
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| **Back-End** | Specialist in one or two of the areas below, proficient in remaining areas: * .Net Framework, C# and Node JS
* RDBMSes and NoSQL DBs (e.g., Postgres, DynamoDB)
* API Protocols and Web Authentication standards (e.g., REST and JWT)
* Web Security
* Architectural Patterns
* Containerization (e.g., Docker, Kubernetes)
* Web Servers (specifically IIS)
* Automated software testing
* (Preferred) AWS technologies (e.g., Aurora, EC2, S3, CloudWatch)
* (Optional) C / C++
* (Optional) Experience with Linux
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| **Front-End** | Specialist in one or two of the areas below, proficient in remaining areas:* Web Application Technologies, especially with skill in HTML, CSS and JavaScript
* TypeScript
* Front End Frameworks (especially Angular)
* Writing modern CSS and understanding CSS architectures (e.g. BEM)
* Front-End Testing Frameworks (e.g., Mocha, Playwright)
* Design systems
* (Optional) Cross-Platform Development (mobile to desktop)
* Strong Skills in UX / UI principles
* (Optional) Qt with C++
* (Optional) React
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| **Full Stack** | Back-End: Specialist in one or two of the areas below, proficient in remaining areas: * .Net Framework, C# and Node JS
* RDBMSes and NoSQL DBs (e.g., Postgres, DynamoDB)
* API Protocols and Web Authentication standards (e.g., REST and JWT).
* Web Security
* Architectural Patterns
* Containerization (e.g., Docker, Kubernetes)
* Web Servers (specifically, IIS)
* Automated software testing
* (Preferred) AWS technologies (e.g., Aurora, EC2, S3, CloudWatch)
* (Optional) C / C++
* (Optional) Experience with Linux

Front-End: Specialist in one or two of the areas below, proficient in remaining areas: * Web Application Technologies, especially with skill in HTML, CSS and JavaScript
* TypeScript
* Front End Frameworks (especially Angular)
* Writing modern CSS and understanding CSS architectures (e.g. BEM)
* Front-End Testing Frameworks (e.g., Mocha, Playwright)
* Design systems
* (Optional) Cross-Platform Development (mobile to desktop)
* Strong Skills in UX / UI principles
* (Optional) Qt with C++
* (Optional) React
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| **Mobile** | Specialist deeply in one or two of the areas below, proficient in remaining areas:* Developing native iOS or Android apps.
* Implementing Web Services (including integrating REST APIs).
* Ability to work with multiple languages and platforms. (e.g., Swift, Kotlin)
* Kotlin Multi-Platform Mobile (KMM)
* Latest mobile programming concepts (e.g., flows, coroutines, ReactiveX capabilities, Jetpack Compose, SwiftUI etc.)
* Working with device hardware sensors (e.g., Bluetooth). Cross Platform development tools (e.g., React, Flutter, KMM)
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