

Senior Embedded Software Engineer – Job Description

About Delta-Q Technologies Corp.:

Delta-Q Technologies, founded in 1999 and based in Burnaby BC, is a leading provider of power conversion and power management products to the electric and hybrid drive vehicle industries. With an industry leading high frequency battery charger achieving strong commercial success, and two new products just hitting the market, our business and new opportunities are growing tremendously. Delta-Q's product suite improves overall vehicle performance at a lower system and lifetime operating cost. Our products are used by leading OEMs in the electric and hybrid drive vehicle industries including golf cars, floor machines, aerial work platforms, Neighbourhood Electric Vehicles, plug-in hybrids and utility vehicles.

Delta-Q adheres to a lean philosophy and is managed by an experienced team committed to the most current and effective business and product development practices. With our OEM customers, we have demonstrated our willingness and need to involve the customer in product design at its very inception. The result of this customer collaboration is a product designed to meet real-world customer needs and an improved ability for us to anticipate future market needs. By focusing on our core competencies and employing best of class subcontractors for other areas, Delta-Q provides the best overall product and service.

For more information about Delta-Q Technologies, please visit us at www.delta-q.com.

Position Summary:

The Automotive Senior Embedded Software Engineer specifies, designs, codes, integrates, tests and debugs complex software programs for a variety of platforms to support product development initiatives. Additionally provides technical and process improvement feedback into the business. Also provides technical and work planning guidance to more junior developers and works independently with minimal supervision.

Principal Responsibilities:

- Writes technical documents including but not limited to requirement, technical reports, design specifications in a clear and concise manor using in house or COTS tools
- Architects optimized software for efficiency and maintainability within internal and external quality and coding standards and based on other engineer's designs
- Designs software using a known and well respected methodology
- Integrates internal and third party software modules together and integrate test the combined package
- Debugs software on target using COTS debuggers and/or emulators
- Resolves problems that are diversified and complex, requiring the development of new or improved techniques and procedures when not covered by established practice.
- Validates software on host, on target and in vehicle using in house or external COTS tools
- Provides technical guidance and supervision to junior developers via mentoring
- Complies with, mentors juniors on and suggests improvements with the company's software development processes and procedures. Including being an active user in version control, defect tracking and change control in accordance with the development process
- Writes and updates support applications/scripts and macros to aid in the development process
- Performs reviews and audits on other team members work products as required
- Works and interfaces with engineers of different disciplines
- Creates and updates automated build and test environments using COTS or in house tools
- Works offsite, attends meetings and communicates with clients and subcontractors as required
- Reports project progress, issues and risks to supervisor. Additionally provides effort estimates, feasibility reports and soundness levels on projects/work packages to supervisor
- Plans their own work and the work of junior developers where required
- Keeping abreast of market development and contributing new ideas into the business
- Carries out other related tasks and projects as required

Qualified Candidates should possess:

- A Degree in Engineering/Computer science discipline.
- Experience of the full product life cycle at a senior level
- Expert skill level in embedded C software development with 9+ years related experience
- 3+ years experience in the development of embedded Automotive software or 5+ experience of working within a rigorous and robust process
- Structured design methodology with 5+ years experience
- Substantial software testing experience including knowledge of different methodologies and the use of COTS tools.
- Experience of supervising at least 2 junior engineers for 4+ years.
- Experience of creating and maintaining 2+ different automated build environments
- Experience of multiprocessor system development is preferred

- PowerPC experience would also be an asset
- Experience of subcontracting would be desirable
- Fluency in English

The candidate shall additionally have the following skills:

- Good to expert skill level in 1 further high level language and good skill level in Assembler
- Competency in scripting languages such as Perl, Python and Shell
- Expert skill level in configuration management, defect tracking and change control
- Knowledge and experience using an RTOS
- Expert MS office user
- Knowledge of UML methodology would be advantageous

The following automotive skills would be beneficial to the application:

- Good knowledge and experience of CAN, CAN standards and commercially available software such as CANalyzer, ISO 11898, J2284, CANbedded, Volcano, GM LAN, FNOS
- Knowledge and experience with OBD diagnostics (EURO and OBDII) and commercially available software and tools such as CANoe, CANDesc and experience with ODX
- Knowledge in MISRA, Automotive SPICE and CMMI would be highly desirable
- Experience of working within a V-cycle development model is a particularly strong asset
- Experience of having worked with or for an automotive OEM is highly desirable
- Knowledge of CCP/XCP and the tools INCA, ATI and CANape would be an advantage
- Experience of using and configuring OSEK RTOS is highly desirable for this position
- Knowledge of safety development standards such as ISO 26262 is also beneficial

The successful candidate shall also be able to demonstrate the following competencies:

- Problem solving, leadership skills, teamwork skills, organization skills, analytical skills, time management, good interpersonal skills, coaching skills, diligence, flexibility, adaptability, positive attitude to work, strong results orientation, negotiation skills and project multitasking.

A competitive salary, bonus, options and benefits package will be offered to the selected candidate. Delta-Q also provides relocation assistance.

Our Privacy Commitment to Candidates:

We respect your privacy and will never submit a resume to a third party without your permission. You can be assured that the information you give us will never be forwarded to any hiring company without your specific, direct permission in advance.

Response Information:

Please send resume as an attachment to careers@delta-q.com quoting "Senior Embedded Software Engineer" in the subject line of the email.

Thank-you,
Delta-Q Technologies Corp.