

MacDon Industries Ltd. – Software Developer

PURPOSE and SCOPE:

Participate as part of a team in the development and continuous improvement of innovative, class leading agricultural product designs for the Ag/Heavy Duty Off-Road machinery market. Team compositions vary and change from time to time, but will involve multiple engineers and technologists, team leaders, prototype shop and test personnel, supply/marketing/product support/publications/manufacturing and other specialists.

RESPONSIBILITIES:

Participation as a team member in all team project activities as identified, including but not limited to:

Ag/Heavy Duty Off-Road machinery software development for Microcontrollers with experience in:

IQAN Creative Studio, C/C++/C#

Ag/Heavy Duty Off-Road machinery software development for embedded Linux with experience in:

QT creator environment, QML or another declarative programming language, C/C++/C#, JavaScript, Bash/Shell scripting

Ability to understand various Agricultural Machine control system theory relating to electrical/mechanical/hydraulic systems.

Experience with automation of equipment, vision/LiDAR/GPU systems would be an asset

App development for Android/iOS devices

Review and provide software spec improvements or maintenance for complex subsystems.

Design support, including travel, for current product production and field issues.

Provide support for software DVT activities, Prototype build and testing.

Detailed understanding of communication protocols such as CAN (J1939), ISOBUS, RS232, USB, and Ethernet.

Experience with model based software design using the MATLAB/Simulink tools.

Experience in project planning and vendor selection.

Component, subsystem, system designs to meet set objectives of performance, cost, durability.

Risk assessments (DFMEA)

Develop and implement validation plan (Unit Testing, Hardware/Software in the loop, DVT)

Build and support prototypes

Current product engineering support, develop product and service related publications.

Continuous learning of MacDon and competitive products.

Review and take appropriate action to all daily test reports and creating and supporting shop and test work orders

MS Office products, in particular a good working knowledge of Excel.

Other duties as assigned.

QUALIFICATIONS:

Education and Experience

Graduate of an accredited Engineering or Technology program.

Eligibility for APEGM or CTTAM registration.

Skills and Knowledge

Experience in Ag/Heavy Duty Off-Road machine design, and a strong background in mechanical/hydraulic/electrical systems are assets.

Farm background is highly desirable. Including extensive experience operating and maintaining farm equipment; particularly harvesting equipment used in the markets MacDon competes in globally.

Click [here](#) to apply on company site.