

Your next great leap

Senior Electronic/Software Controls Engineer-50428751

Why John Deere

New demands require innovative solutions. At the John Deere Product Engineering Center in Waterloo, Iowa, you'll make what isn't possible today, tomorrow's reality. By developing innovative technology and products, we're helping people be smarter about how they use the land. Global positioning, remote equipment operation, biofuels, electric hybrids. What's next? Help us figure it out. There's no roadmap . . . just 1,300+ inquiring minds like yours - working together at John Deere's largest engineering center.

What You'll Do

At John Deere Ag & Turf Division as a Senior Electronic/Software Controls Engineer you will contribute to a multi-disciplined team to perform specify, design, develop, test, and document major electrical, electromechanical, electro-hydraulic functions / subsystems for agricultural electronic drivetrain control systems. Development responsibilities include design / specification of electronic hardware interface, as well as application software. In addition you will:

- Lead the design of robust electro-hydraulic transmission systems and the control algorithms.
- Verify that drivetrain electronic subsystem meets requirements, through a combination of virtual and hardware based testing including; desktop, bench, vehicle simulator testing.
- Create and develop software per the John Deere Embedded Software Development Process.
- Utilize modeling software (e.g. Simulink) and a dynamic transmission model consisting of electro-hydraulic, electro-mechanical, and electrical sub-systems.
- Support electronic hardware design group with requirements.
- Analyze current production/experimental issues, develop an understanding of the root cause and create appropriate action plans to resolve these issues.
- Provide technical support during system field-testing activities on an as needed basis.
- Provide necessary design documentation to support development of service publications.

What It Takes

We need an excellent communicator who thrives on solving problems and working in a team environment. Ideally you will have a Bachelors degree in Electrical Engineering or equivalent with an emphasis in control systems. In addition we require:

- Experience in the field of Mechatronics and have a solid understanding of electrical/electronics, hydraulics, and mechanical systems.
- Experience in control systems design.
- 5+ years experience with C programming language and software development tools for embedded micro-controllers.
- Experience with implementing embedded software control systems.
- Familiarity in subsystem design, software development, and electronic circuit design and analysis.

A strong candidate would also have:

- Technical experience relating to design/diagnostics of mechanical/electrical/hydraulic systems.

- Experience with control systems design and analysis on agricultural or drivetrain applications.
- An advanced engineering degree.
- 2+ years experience with model based software design (MBSD) using the Matlab/Simulink tool chain.

What You'll Get

At John Deere, you are empowered to create a career that will take you to where you want to go. Here, you'll enjoy the freedom to explore new projects, the support to think outside the box and the advanced tools and technology that foster innovation and achievement. We offer comprehensive relocation and reward packages to help you get started on your new career path. Click here to find out more about our [Total Rewards Package](#).

The information contained herein is not intended to be an exhaustive list of all responsibilities and qualifications required of individuals performing the job. The qualifications detailed in this job description are not considered the minimum requirements necessary to perform the job, but rather as guidelines. An Equal Opportunity Employer, John Deere requires a diversity of people, perspectives and ideas to address the complex challenges of its global business.

Job Product Engineering

Primary Location Iowa-Waterloo

Organization Agriculture Equipment

Schedule Full-time

Shift Day Job

Senior Electronic/Software Controls Engineer

Visit www.JohnDeere.jobs
for more information

John Deere is an Equal Opportunity Employer



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