Job Brief

Fastrac is JCB's high speed, full suspension tractor; a premium product bristling with technology and innovation. We are an Engineering team passionate about our products and customers with exciting product plans fuelled by sales growth. A unique opportunity has arisen for an Electronic / Embedded Software Engineer to join the Fastrac engineering department within JCB Landpower, working on both exciting and challenging new tractor programmes.

Role Title: Electronic / Embedded Software Engineer
Business Unit: JCB Landpower
Location: JCB Landpower, Leek Road, Cheadle, Staffordshire, ST10 2JU
Reference Number:

Main duties and responsibilities:

Reporting to the E&E Manager, you will join a highly focused, passionate project team, working on the most technologically advanced of JCB's products, the Fastrac. Specific duties are adaptable depending on your area of expertise:

- Design and development of new tractor-based embedded safety critical control systems including electronic control units, vehicle communications networks and displays in C language.
- OR application coding Operator Display terminals in QT / C++ .
- Analysis and calculations of performance levels for Safety Related Parts of Control Systems (SRP/CS).
- Authoring of documentation including requirements specifications, technical documentation, test specifications, reports, user manuals and work instructions.
- Intuitive user interface design.
- Testing and validation of hardware, software and vehicle communication systems.
- Liaising with internal/external customers/departments, as required.

About you:

You will be a competent engineer, self-motivated and demonstrate initiative, enthusiasm, a sense of urgency, the ability to communicate at all levels, coupled with minimum 2 years experience in the automotive electronics sector.
Knowledge of either agricultural tractors, commercial vehicles, off road vehicles or military vehicles would be a distinct advantage.

The position would suit a candidate with the following attributes:

- Education to degree / HND level in Electronic Engineering, Computer Science or a similar, relevant subject.
- Proficient in the C programming of safety critical software with knowledge of MISRA C guidelines.
- OR Proficient in QT based applications (or similar)
- An appreciation that software is component within a complex mechanical system.
- Experience in electronic hardware and real time embedded design to control electromechanical and/or hydraulic actuators.
- Experience of microprocessors, development tools and emulators.
- Experience of software life-cycle management and associated tools (e.g. version control, defect tracking, code reviews).
- Experience of Matlab, Simulink and/or other relevant model-based tools for control systems design and validation.
- Knowledge of CAN bus networks, multiplexing and vehicle harness architecture.
- Knowledge of control systems and control theory.
- Experience of DFMEAs, risk assessment, FMEAs, Environmental Standards and EMC compliance.

What's in it for you?

To say thank you for your hard work, we will work with you to support your career progression and development. We will also provide a competitive salary, company pension scheme and access to medical insurance, dental care schemes and the company's healthy living centre alongside 33 days annual leave.

JCB: Building a Brighter Future
JCB is a truly world class, family owned business. We are proud of our achievements and recognise that future growth and success is shaped by the ambition of the JCB team.
If you are looking for a career with a business where people really count, look no further than JCB.

JCB is an equal opportunities employer. We value diversity and welcome applications from candidates from all backgrounds.