

[www.joysonsafty.com](http://www.joysonsafty.com)

**We are Joyson Safety Systems –  
A Mobility Safety Company.**



Joyson Safety Systems is one of the leading global developers and manufacturers of automobile occupant protection systems with a turnover of ca. 4,8 billion euros and more than 50,000 employees worldwide. We represent innovation and progress. As a reliable and skilled partner of the automobile industry, we design, develop and produce occupant protection systems and components. Our portfolio includes steering wheels, airbags and generators, safety belts, technical plastic components, electronics and sensor technology which we supply to nearly all renown vehicle manufacturers worldwide.

**Our team in Aschaffenburg needs support and we are seeking:**

## **Software Developer - Motor Control Expert (all genders) EMEA Electronics**

Site:

**Aschaffenburg**

### **What you can change — your duties**

- Develop complex device drivers for operation and configuration of DMR motor bridge board
- Integrate field oriented motor control algorithm developed in Matlab/Simulink
- Develop software framework for torque/speed motor control loops capable of integration into AUTOSAR environment
- Develop usage concept of uC internal peripherals for control of 3-phase motor bridge
- Support optimization of motor control algorithm
- Support optimization of motor control hardware
- Support integration of motor control software into application project software
- Developing DMR (Disc Motor Retractor) motor control model
- Generate speed and torque control algorithms for motor based on field oriented commutation
- Defining interface to high-level control algorithm
- Verify and optimize DMR motor control model and algorithms through hardware-in-the-loop operation using dSpace AutoBox

### **Impress us - your qualifications**

University degree, preferably in computer science, technical computer science, electronics or a comparable qualification

Several years of professional experience in the field of embedded software development, ideally in the automotive industry

Knowledge of digital signal processing in software

Understanding theory of brushless motor operation and control

Understanding of motor control hardware characteristics

Experience with functional safety applications (ISO26262)

Knowledge of automotive development methods (ASPICE)

Ideally, experience with NXP/Freescale microcontrollers and development tools

Preferably experience with Matlab/Simulink and dSpace AutoBox tools

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## What we offer — your benefits

First aid station & Health Care Centre

Health management

Discounts at well-known gyms

Company canteen

Further training as well as in-house training

Free parking

Flexible working time

Good transport connections

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## Contact

We look forward to receiving your application! Please send by e-mail to your contact:

**Sandra Hornatkiewicz**

**[sandra.hornatkiewicz@joysonsafety.com](mailto:sandra.hornatkiewicz@joysonsafety.com)**.

Your contact will also be available for any queries you may have.