



# Mark Roberts Motion Control

# Embedded Software Engineer



Reporting To

Contract Type

Salary

Blindley Heath, Surrey, RH7 6JP

Electronics Design Manager

Permanent, Full-Time

£40,000 - £44,000

#### THE ROLE

Mark Roberts Motion Control is looking for an inquisitive and experienced Embedded Software Engineer. You will be involved in development cycles for our existing products as well as New Product development.

Our products involve the control of motors, interfaces for controlling motion sensing, analogue amplifiers and general GPIO / Sensor interfacing. You will be involved in development cycles for our existing products as well as new product development. You will see your projects through every step of the way.

A successful candidate will be working alongside the existing multidiscipline R&D team but should also be comfortable working on their own.

# MAIN RESPONSIBILITIES AND TASKS

- Strong programming skills in C within small to medium size microprocessor systems (ARM STM32 and/or DSP and/or Microchip MCU)
- Strong debugging and problem-solving skills
- Able to write and review software design documents which describe the software architecture, implementation and interactions within the various subsystem
- Experience working with CAN, SPI, UART, I2C and USB communication protocols
- Experience with sensor integration over I2C, SPI, etc
- Experience in implementation of TCP/IP network protocols and typical network operation practices
- Foundation knowledge of analogue and digital circuits, and ability to interpret schematics and device datasheets
- Enthusiasm for continuous learning
- Excellent verbal and written communication skills
- Proficient in the use of Jira and Bitbucket

#### SKILLS AND EXPERIENCE

Education

BEng Electronics/Electrical Engineering or equivalent. Other relevant subject areas considered.

JR: 140ESE 260924

Professional Skills REQUIRED	<ul> <li>Proven experience in solving complex Embedded Software problems</li> <li>Experience with Embedded Linux</li> <li>Experience of release management and coding effectively within a team</li> <li>Experience with using hardware tools to aid firmware debugging (Protocol sniffers, Oscilloscope)</li> <li>Proven 'End to End' experience of the New Product Development cycle (NPD)</li> <li>Strong debugging and problem-solving skills</li> <li>Able to review and write clear product design documents which describe the</li> </ul>
Professional Skills ADVANTAGEOUS	<ul> <li>complete product in detail</li> <li>Experience working with TCP-IP, UDP, CAN, SPI, UART, I2C and USB communication protocols</li> <li>Experience with sensor integration over I2C, SPI, etc</li> <li>Experience in VHDL and Intel/Altera FPGA design</li> <li>Experience of designing products for successful volume manufacture (DFM, DFT)</li> </ul>
Personal Skills	<ul> <li>Accuracy</li> <li>Attention to detail</li> <li>Prioritising and Organisational Skills</li> <li>Excellent verbal and written communication skills</li> <li>Enthusiasm for continuous learning</li> </ul>

### THE COMPANY - MARK ROBERTS MOTION CONTROL

We are a robotics company doing some serious hardware and software engineering. By robots we mean 6+ axis robotic arms, large multi axis rigs and 2-3 Axis camera platforms. Our products are used globally in Broadcast studios, Stadiums, Movie Sets and Photography studios to capture motion and stills.

MRMC has been at the front of its field for over 50 years. Starting off from a family business, we are currently a medium sized business thriving and growing bigger every year. MRMC is a Nikon Group Company.

#### WHAT WE OFFER

Our success is only possible because of the team effort from everyone and we recognise the individual input of each person throughout our design and manufacturing process at MRMC.

# **Benefits:**

- flexitime
- discretionary bonus
- private medical insurance for you and your family, including cashback on routine healthchecks
- salary sacrifice schemes, including electric cars, bicycles, nursery discounts and pension
- training and development opportunities
- ample and secure parking

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If you apply online for a position with Mark Roberts Motion Control, we will use the information you provide to assist in the recruitment and selection process. Information provided on the application form and CV will be retained in all cases in electronic format cases and/or hard copy for as long as is required for the purposes of: the administration of your application, consideration for roles in the future, forming the basis of your employment records, if your application is successful, discharging any legal or regulatory requirements. Mark Roberts Motion Control will process your personal data in accordance with our Privacy Policy which can be found on our web-site. If you need more information on how long your data is kept for, which varies, depending on a stage of recruitment you've gone through, please contact us and we will provide relevant information.

By submitting your application/CV online you are confirming you have read and accept the above and you are giving your consent to MRMC to process your personal and sensitive personal data for the purposes explained above.