EMBEDDED SOFTWARE ENGINEER

THE COMPANY

August Robotics is an international company which builds **application-specific robots** to automate workflows for businesses. The company's R&D function is based in Shenzhen (China), and the company also has commercial and sales offices in Hong Kong, Germany and USA.

August Robotics believes in the potential for **humans and robots to collaborate and co-operate**, and we aspire to be at the forefront of the coming "robotics revolution". August Robotics is a **world-leading robotics company** in many ways. Unlike other companies, we genuinely do all the R&D for our robots ourselves, from product conceptualisation right through to manufacturing and commercialisation. And **we build our robots quickly**. Our first robot, Lionel (an application-specific robot for the exhibition industry) was already commercialised and **earning substantial revenue** in Europe and the USA less than 2 years after we wrote the first line of code.

August Robotics has begun work on its next wave of **revolutionary robots** and is growing its team accordingly.

THE ROLE

As a Embedded Software Engineer, you will work in a hands-on environment with advanced technologies. **Your primary responsibility will be to code the underlying controllers** which drive the company's robots and various pieces of robotic equipment.

You will also:

- Work to integrate the input from various sensors to help the robots **better understand their environment** and to navigate and react accordingly
- Optimise the design and implementation of the various **motors and control systems** to ensure that the robots move, function and operate in a smooth and reliable manner at all times
- Test obstacle avoidance and other core robot functionalities and then **diagnose, troubleshoot and resolve** the issues that arise
- Write code to drive, optimize and enhance the performance of the robot's constituent micro-controllers

Your role will be based in August Robotics' Robot R&D centre in **Shenzhen**.

YOUR SKILLS

You **must** have:

- **Expert-level programming skills** in either C/C++ or Python (and its associated libraries)
- Experience with **microcontrollers** (including serial communication, debugging interfaces, etc…)
- Practical experience with PID
- University degree in **Control Engineering, Software Engineering, Automation, Robotics Engineering** or a related discipline
- Your University degree should be from a top-tier university in China (MUST be a 985 university, ideally a C9 university) OR from a **top-tier university** in Hong Kong or overseas
- Minimum **2 years full-time work experience**, including recent experience in which you helped to design, build and develop a technical product **from start to finish**
- Familiarity with general functionality and constraints of the various types of **sensors** typically used in developing consumer electronics and/or robots
- A strong and infectious enthusiasm for technology and automation, an **ability to think creatively** to solve technical problems
- Ability to **foresee potential issues** before they emerge and take proactive action to avoid them
- **Native level fluency in Mandarin Chinese** (spoken English is NOT required for this role)

In addition to the above requirements, ALL of which you must demonstrate to be considered for this role, the following skills are helpful but not required:

- Experience with customised automation projects in a University or commercial context
- An understanding of robot kinematics and dynamics, wireless communication, circuit boards (Arduino, etc.)
- Familiarity with the road-marking or interior decorating industries and the equipment used in those industries
- Experience with using UV-C light for disinfection
- Some limited experience coding in Python and/or ROS

You should be **comfortable with ambiguity** and excited by the idea of working in an entrepreneurial culture. You should be **open to new experiences**, open to learning new things, and willing to jump in and lend a hand on a range of different issues and task when the need arises.

August Robotics Ltd.
info@augustrobotics.com
www.augustrobotics.com