

Job Description – Senior Electronic Engineer

The purpose of this role is to ensure that CoolLED remains a market leading manufacturer of LED illumination systems by designing and developing the electronic hardware used in new and existing CoolLED products.

This position reports to our Engineering Manager.

Why join CoolLED?

CoolLED designs, manufactures, and markets cutting-edge LED illumination systems for microscopy, advancing biomedical research and other high-tech industries. There are many reasons to join the team, and here are just a few...

- **Make a difference:** We are proud of our role as a trusted supplier to leading global brands such as Olympus and Nikon, and as a pioneer of research into illumination technology in collaboration with leading universities.
- **Team spirit:** Everyone in our team contributes to the success of the company. We are seeking like-minded individuals to join us and enjoy a role which stimulates and is rewarding. Working at CoolLED, you will be a part of a family-style team who often get together for social or charity events.
- **Being greener:** Our technology replaces toxic, energy-hungry mercury-based illumination. This emphasis on sustainability runs through the whole of CoolLED, and you can be part of our constant drive to reduce our environmental impact.

“It’s fascinating to be at the forefront of technology and see how an idea is transformed into a product that brings real-world benefits to some of the most respected scientists around. You feel part of something, and your colleagues will always go out of their way to help you do your bit.” Dr Isabel Goodhand

About this role

CoolLED is an innovative and dynamic company with a great culture made possible by our incredible staff. We are driven by our values and hire only the best and hardest working individuals who love to learn continuously.

The people who thrive at CoolLED have an entrepreneurial spirit and love to solve problems. As a senior electronic engineer, you will contribute to the success of the Engineering team

by using your electronic expertise to design innovative electronic sub-systems for CoolLED products.

What does it take to do this job?

- Honour, Results, Humble Charisma, Velocity, Ingenuity.
- A master's degree or higher in electronic engineering (or similar) with 10+ years of electronic product development experience.
- Top-notch communication skills (spoken and written).
- A love for complex, multidisciplinary, physics and engineering problems and the resolve to do whatever it takes to find solutions.
- An expert understanding of complex electrical designs and systems.
- Demonstrated expert experience in analogue and digital circuit design, development, and troubleshooting.
- A deep appreciation for the need to balance theoretical circuit design with commercial viability.
- A demonstrated experience that displays an ability to learn and apply new skills.
- An enthusiastic willingness to share knowledge and expertise with others.
- A demonstrated ability to work alone AND as part of diverse teams.
- A desire to thrive in a rapidly changing and quick paced environment.
- Demonstratable expert experience with current versions of Altium Designer.

Nice to haves:

- Experience in embedded system development and firmware.
- Experience writing software applications using C#, SQL, and Python.

What will I do?

Because we are a small, entrepreneurial, company our work varies based on our project load and development phase. In your role as senior electronic engineer, you will be expected to provide the following results:

- Work with our sales and marketing teams, customers as well as other interested parties to create specifications defining the electronics required by our various illumination systems.

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- Create electronic hardware requirements from the system specifications.
- Conceptualise analogue and digital circuitry required to meet the requirements.
- Perform prototype testing of critical circuits.
- Work with our optical and mechanical engineers to determine optimal product form and layout.
- Complete the schematic capture and printed circuit board design of the electronics.
- Create BOMs and be responsible for the procuring of PCBAs.
- Lead the effort to perform first revision assembly and testing of electronics.
- Perform analyses on electronic systems and use the result to articulate business risks as well as highlight areas for improvement.
- Take responsibility for design validation efforts.
- Take complete responsibility for conducting and meeting compliance standards such as CE, UKAS and Safety Testing.
- Develop bespoke electronic apparatus needed for design validation.
- Assist with transferring project designs to manufacturing.

We are a small company, and our staff are willing to do anything that needs to be done to accomplish project objectives. Your willing spirit to serve and solve problems is key!

What CoolLED offers...

"I am able to adapt my chosen working hours around personal commitments and preferences which is so attractive. Being able to work a full week, interact effectively with my colleagues, and have a degree of freedom is fantastic!" *Luther Hindley*

- A positive and inclusive working environment
- A 37.5 hour working week
- Flexible working hours to optimise your work/life balance
- 25 days personal vacation + 8 statutory bank holidays
- Eligibility for a Hybrid working pattern
- Competitive salary plus a company profitability bonus
- Life Assurance / Death-In-Service benefits
- Contributory pension scheme

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- Health Insurance (optional at cost for employee's family)
- Parent company (Judges Scientific PLC) Share Incentive Plan

If you have any questions about this role or would like to apply with your CV/resume and a covering letter, please contact us at jobs@cooled.com

CoolLED's Mission

To contribute to science by developing illumination systems that enable research and provide the technology to improve people's lives.

Our Values

Ambitious



in being the best in our industry in all aspects of the business.

Pioneering



in creating ideas to solve problems.

Fair



respecting the people and environment with/in which we work.

Committed



to adding value in everything we do for the benefit of our customers, staff, shareholders, partners and suppliers.

Supportive



in developing and retaining great people allowing them to play to their strengths.