

Photonics/Electronics Engineer

Company Description

Bioherent's mission is to create above state-of-the-art photonic biosensors for a variety of clinical applications, with the goal of simplifying and accelerating the diagnostics pathway at hospitals and other healthcare institutions.

Bioherent was born as a spin-off of the Universidad de Málaga, and its technological basis is the result of decades of research and development in photonics, chemistry, and clinical sciences. The company is moving fast to solve unmet clinical diagnostics challenges, and joining now will provide you with the unmatched opportunity of applying advanced technical skills to improve people's health, and you will have a say on the way the product is designed, developed and implemented where it is required. All of it while working in a high-tech environment in one of the most sought-after cities in Europe: Málaga!

Overall, joining Bioherent is a unique opportunity that will help you nurture your experience and evolve in your professional career, while truly making an impact in society as the ultimate goal of the endeavor.

Job Description

The photonics/electronics engineer at Bioherent will be responsible for the development and design of photonic and electronic subsystems required for the company's photonic biosensors. In this role, you will be required to lead process development and design to create commercial versions of the products.

Your responsibilities will include:

- Supervision of the photonic integrated circuit design .
- Interface of the company with photonic integrated circuit foundries. Generation of photonic integrated circuit masks.
- Design of Optical Systems and assemblies.
- Electronic circuit design and test for signal conditioning and processing in instrumentation and control environment.
- Ability to interface with the microfluidics, chemical and clinical teams, and work alongside them to implement requirements and produce versions of the device applicable to different applications.
- Collaboration with external parties (manufacturing, suppliers, etc.) to ensure the smooth production of the product, from prototype to mass production of the biosensor.
- Fluent in English, writing and speaking.

Background and Key Skills

- Bachelor in telecommunication/electrical engineering, or a comparable technical discipline with substantial specialization in photonics and electronics.
- At least 2 years of experience in photonic and/or electronic design.

- Basic knowledge of photonic design CAD tools (Photon Design, Rsoft, Lumerical...).
- Basic knowledge of electronic circuit CAD tools for simple analog designs (ORCAD, PSPICE, EAGLE...).
- Basic knowledge of scripting and programming languages (MATLAB, Python, C, C++, etc.).
- Basic communication and teamwork skills.
- Ability to work in a fast-paced environment.
- Fluent in English, writing and speaking.

Preferred Skills

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- Master or PhD in Electrical/Telecommunication/Optical Engineering or Physics
- Strong background in photonics with substantial specialization in Photonic Integrated Circuit Design is advantageous.
- Master or PhD in photonics with substantial specialization in photonic integrated circuit design.
- Experience developing electronic circuits for signal conditioning.
- Experience in design of optical system and subsystem assemblies.
- Experience in interfacing data acquisition boards.
- Expertise in scripting languages (MATLAB, Python)
- Expertise in programming languages, such as C, C#, C++, etc.
- Basic hardware programming skills in Arduino, ATMEL, etc.
- Basic knowledge in graphical user interface (GUI) programming and design.
- Expertise in controlling measurement equipment via GPIB or equivalent APIs.
- Validation and testing of prototypes, ensuring they meet all applicable specifications.
- Collaboration with external parties (manufacturing, suppliers, etc.) to ensure the smooth production of the product, from prototype to mass production of the biosensor.

Contact Information:

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