

# SpineGuard, an innovative medical device company, based in Vincennes (FRANCE), is looking for a Research & Development Engineer.

## The Company:

Founded in 2009, SpineGuard is a French company based in Vincennes, deploying its dynamic surgical guidance (DSG<sup>®</sup>) digital technology in innovative applications to improve and secure the insertion of bone implants.

#### Mission :

Within the technical team and under the supervision of the R&D Director, you will be part of the development of the next generation of devices, from concept definition to product release, as well as the improvement of the existing products. SpineGuard designs innovative and high-tech devices including electronics, hardware, and software.

### **Duties & Responsibilities**

- Develop new robotics applications based on the company's technology and using artificial intelligence. Participate in the design of innovative products within a team and in accordance with the requirements from the users, marketing, production and quality assurance departments.
- Program, design and develop algorithms, controls and mechatronic assemblies including sensors and actuators around SpineGuard technology
- Organize or carry out prototyping, development and feasibility phases
- Define and monitor testing, drafting test reports and technical notes
- Collaboration within the project team, monitoring and updating the project plans, and regular reporting on the project progress
- Design and successfully launch medical devices ensuring product development in accordance with the company's quality system, which incorporates regulatory requirements from the different countries where products are sold.

#### **Ideal Profile:**

Mechatronics or robotics Engineer, with at least 2 years of experience in the design of innovative devices, or graduating from a work-study program.

Experience in the following areas is a must:

- Programming, servoing and signal processing (C / C ++, Python, MATLAB)
- Mechatronic design of embedded systems including sensors and microcontroller (Arduino, Raspberry Pi, Linux)

Knowledge in the following areas would be a major asset:

- Robotics, artificial intelligence, and machine learning
- Mechanical design, CAD, Solidworks and drawing
- Knowledge of medical devices, associated standards and regulations (ISO 13458, FDA 21 CFR Part 820, CE marking, MDR, IEC 60601, IEC 62304, etc.)

English required, French is a plus.

# Contact :

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