



**Puzzle Medical**  
Devices

## **MONTREAL, Electronic designer, Full-time in-person**

Puzzle Medical is a Canadian company specializing in the development of a low-risk heart pump for high-risk patients. Puzzle Medical enables mechanical hemodynamic support to increase accessibility, improve patient quality of life, reduce hospitalizations and reduce the global economic burden related to the disease. To date, Puzzle Medical has completed acute in-vivo preclinical implantations with tremendous success, a financing round from clinicians and entrepreneurs across the world, and received U.S. Food and Drug Administration (FDA) Breakthrough Device Designation.

### **POSITION SUMMARY**

Puzzle Medical is presently seeking a highly motivated *Electronic designer*, with experience in embedded system design, electronic compliance testing and manufacturing of medical devices electronic systems. The successful candidate will undertake electrical engineering projects from prototype to production in a lab work environment. The *Electronic designer* will work hands-on cooperatively with a cross-functional development team including members with clinical, business and technical expertise from all areas involved in product development through commercialization.

### **ROLE AND RESPONSIBILITIES**

- Design and develop controller systems for class III medical devices according to product requirements :
  - PCB design
  - Embedded software/firmware development
  - Battery powered circuit design
  - Prototype development
- Undertake internal and outsourced electrical manufacturing activities :
  - PCB manufacturing
  - Circuit assembly
  - Electronic prototyping
- Execute electrical design verification and validation activities

### **REQUIREMENTS**

- Technical degree or Bachelor's degree in Electrical Engineering or related Electronics discipline
- Deep knowledge of PCB design
- Strong experience working with microcontrollers with one of the common family (ARM, AVR)
- Embedded programming capabilities
- Experience designing battery powered embedded circuit
- Technical capabilities such as PCB assembly, connector assembly, troubleshooting using basic instrumentation (oscilloscope, multimeter, power supply etc.)
- Strong understanding of electrical design integration with mechanical elements
- French and English verbal and written communication skills

### **ASSETS**

- Knowledge with class III medical devices
- Understanding of design control, quality control and manufacturing in an ISO-13485 environment
- Prior experience with IEC 60601-1/-2 standards (leakage current and safety requirements)
- Experience working with EMI and RFI
- Experience working with ESD (electrostatic discharge) to develop defibrillator protection circuit
- Experience with EMC testing
- Keen on developing new technologies and solving difficult problems

### **WANT TO JOIN US ?**

Send your CV at [careers@puzzlemed.com](mailto:careers@puzzlemed.com) and we'll reach out shortly !