



Job Title: **EMC Design Specialist**
Reference: **ENG-058**

About EERS

EERS develops enabling hardware and software for noise management, hearing protection, audio clarity and voice intelligibility through devices that are comfortable and secure. We are expert in real-time signal processing that builds applications for augmented hearing in industrial, medical, and consumer use cases.

Our bio-mechanical skills allow us to map and address the complexity of the human ear canal to build novel comfortable, usable, and manufacturable earpieces that are acoustically efficient.

The EERS team is made up experts in audiology, acoustics, embedded software, hardware design, bio-mechanical, industrial design, and prototype assemblers capable of working on the smallest of form factors.

Our head office is located in the heart of downtown Montréal. We offer competitive salaries as well as a great team environment with a hybrid WFH model. EERS Global is an equal-opportunity employer committed to diversity.

Job Description

We are looking for an **EMC Design Specialist** to join our multidisciplinary R&D team!

We have just launched a very challenging and exciting new project which will allow the EMC Design Specialist to be directly involved in all phases of product design. Reporting to the Senior Hardware Design Engineer, we expect him/her to perform a variety of tasks ranging from proof-of-concept prototyping to high-level design, while still being able to do hands-on debugging. In addition, this EMC Design Specialist will have a direct impact on the design of the product family that we are currently defining. We are therefore looking for a versatile and passionate team member who is not afraid to take on multiple tasks.

Duties and Responsibilities

- Collaborate with cross-functional R&D teams on new product designs.
- Advise the R&D team on EMC design best practices implementation.
- Develop a testing environment and methodology to simulate the product's operational environment.
- Develop and/or integrate EMI shielding solutions.
- Develop and/or integrate antennas for wireless communication solutions.
- Lead physics and electromagnetic modelling and simulations when necessary.
- Create proofs of concepts and early prototypes to validate product design choices.
- Review electrical and mechanical designs for proper integration of antennas, EMI shielding and guarantee signal integrity.
- Design and conduct experiments to troubleshoot antennas, EMI shielding and signal integrity issues on the prototype units.
- Maintain accurate documentation throughout the development and validation phases.
- Guide the R&D team on the selection and interpretation of applicable EMC standards.
- Work with external laboratories for EMC testing and certification.
- Train prototyping technicians.



Education

- Master's degree in electrical engineering, or equivalent combination of education and experience.

Qualifications

- 6+ years of experience integrating and/or designing antennas and EMI shield.
- Integration of radio-frequency components and/or experience with wireless devices.
- Troubleshoot hardware and EMC/EMI issues using lab equipment (ex: oscilloscope, spectrum analyzer, VNA, etc.).
- Significant experience with EM simulation software.
- Solid background in fundamental physics and electromagnetism.
- Solid background in test engineering (methodology, planning, reliability, data analysis, etc.).
- Working with complex, high-density, multi-layer PCBs.
- Experience working closely with mechanical engineers and product designers.

Nice to Have

- Analog circuit design and troubleshooting is a major asset.
- Involvement in the design of a complex product that was commercialized.
- Experience with Wi-Fi and Bluetooth.
- Experience with medical devices.

Soft Skills

- Great communication skills in English and French.
- Ability to efficiently communicate design ideas and solutions.
- Strong writing and documentation skills.
- Ability to work both individually and as part of a team in a fast-paced environment.
- Autonomy and problem-solving mindset
- Excellent time management skills and ability to contribute to multiple projects simultaneously.

Depending on the daily tasks to be performed, working from home may be possible. However, as we often need laboratory equipment and great collaboration between the R&D teams is essential, the EMC Design Specialist must be able to come to the office with short notice if necessary.

If you are meticulous, a problem solver, and a team player, you will feel right at home. Please send your cover letter and resume to jobs@eers.ca OR submit them through our [EERS Career platform](#).