





Title: Development of acoustic imaging algorithms for impulse noise sources

A one-year postdoctoral internship, at the Mechanical Engineering Department of the École de technologie supérieure (ÉTS), Quebec (Canada), is available in 2024 within the Montreal Acoustics Research Group (GRAM).

The postdoctoral fellow will work within a research program on impulse noise in the workplace funded by the Institute of Occupational Health and Safety Research (IRSST).

He/she will be involved in the development of innovative algorithms for a spherical microphone array to localize impulse noise sources. Various scenarios will be explored to create a representative database of workplace environments. Source localization algorithms will be developed in the time domain. Experiments will be conducted in the anechoic and reverberant rooms of the GRAM with a spherical microphone array.







Profile:

- PhD in mechanical or electrical engineering;
- Strong knowledge in signal processing with Matlab, Python, or C++;
- Experience with microphone measurements;
- Knowledge in numerical simulation and computer-aided design;
- Motivation and interest in workplace noise;
- Excellent interpersonal skills and communication abilities;
- Proficiency in English and, if possible, French languages, both orally and in writing;
- Being autonomous, resourceful, and enjoying working in a team to carry out a research project.

Contacts

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