

Post-Doctoral Fellowship/Research Scientist Position

MIRARCO is a university-based mining research center that has been creating novel solutions to the challenges facing the mining industry for over 20 years. MIRARCO is a not-for-profit corporation comprised of a dedicated workforce of experienced professionals and students at all levels of post-secondary education. This hybrid of academic and professional dynamics has helped advance the innovative research for which MIRARCO is well known.

PROJECT DESCRIPTION

The postdoctoral position will be associated with the project "Software Innovation & Development for Mine Site Optimization (SOT+)", conducted in partnership between MIRARCO and RPMGlobal. The goal of this project is to support the development and validation of new modules in the Schedule Optimization Tool (SOT) software for robust optimization accounting for uncertain metal prices and ore grades as well mine ventilation constraints. The proposed project will deliver commercial-grade software tools for mines in Ontario and globally.

JOB DESCRIPTION

MIRARCO is seeking a recent Ph.D. graduate with an understanding of underground mine planning and ventilation. The PDF will be involved in all research and development aspects of the SOT+ project. The PDF will be a member of MIRARCO's Software Group and will report to the Director of Software, and engage with project partners at RPMGlobal and Queen's University.

REQUIREMENTS:

- Ph.D. or equivalent in Mining Engineering, or a closely related field. You must have completed all requirements of your doctoral degree prior to December 2022;
- Creative problem-solving skills and the ability to design solutions not immediately apparent;
- Proven time-management, organization/prioritization skills to meet deadlines;
- Excellent interpersonal, verbal and written communication skills;
- Self-motivated and committed to continuous learning;
- Ability to work both independently and as part of a team;
- ***** The following can be an asset:
 - Knowledge of mine ventilation and mine ventilation modeling software;
 - Having experience in the mining industry;
 - Experience in software development and work in C++ programming language, data analysis, mathematical modeling, applied mathematics, or machine learning;

APPLICATION REQUIREMENTS

Please note that all documents have to be converted and merged into a single PDF document and attached as one PDF file.

- A cover letter with a statement of relevant experience and research interests
- Up-to-date curriculum vitae
- Links to recent publications
- Contact information of two referees of which one should be your Ph.D. supervisor(s)

The postdoctoral position is for 18 months, with the option to extend dependent on performance and funding.

To Apply:

Please submit complete application file to **info@mirarco.org**, also quote "**Post-Doctoral Fellowship**" in the subject heading. Although we appreciate all candidates' interest in this position, only those selected for an interview will be contacted.