

CAREERS & RESEARCH

Job Title:	Metal Earth / MERC - Bharti School of Engineering and Computer Science MASc and PhD students (Spring 2022)
Job ID:	#2022-01
Project Description	<p>Metal Earth requires a student(s) to assist in integrating various geoscience spatial data types creating a map(s) showing areas favourable for mineral exploration. This will be undertaken by employing a variety of machine learning algorithms (e.g. random forest, SVM, Neural nets) to analyse, integrate and present the data. The results will be published and be available to Canada's exploration industry for ground evaluation and follow-up.</p> <p>This position will require a variety of skills including knowledge of integration and analysis of spatial geoscience data and advanced data analysis skills including machine learning algorithms. The successful student(s) will work closely with geologists from the Metal Earth project to afford a productive collaboration between geology and computing science faculty at Laurentian University.</p>
Metal Earth/ MERC	<p>With CAD \$104 million in funding provided by the Canada First Research Excellence Fund (CFREF), the Northern Ontario Heritage Fund and through strategic partnerships with universities, government geological surveys, and international research centres, Laurentian University has initiated Metal Earth - the largest ever mineral exploration research project undertaken in Canada. Metal Earth seeks to identify and understand the processes responsible for Earth's differential metal endowment during the Precambrian. This research initiative aims to transform our understanding of Earth's early evolution and how we explore for metals.</p> <p>Metal Earth is led by the Mineral Exploration Research Centre (MERC) at Laurentian University in Sudbury, Canada. MERC was established in 1997 and comprises an internationally recognized group of researchers from academia, industry, and government.</p> <p>https://merc.laurentian.ca/research/metal-earth</p>
Bharti School of Engineering & Computer Science	<p>The Bharti School of Engineering and Computer Science undertakes pure and applied research in the mining, mechanical, chemical engineering and computer science disciplines. Faculty members in computer science are involved in research related to artificial intelligence using machine learning techniques in various applications. This opportunity provides graduate students with an excellent opportunity to collaborate on the Metal Earth project, to fuse techniques in artificial intelligence and mineral exploration to produce novel analytics and data products of relevance to geoscience.</p>

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Funding	Metal Earth graduate research projects are fully funded for two (MAsc) or four (PhD) years and include complete field and analytical support.
Laurentian University	The University's Policy and Program on COVID-19 Vaccination is available here . By submitting an application to Laurentian University you acknowledge that you have read the Policy and Program. Should you be successful in securing funding at MERC you are aware that this would be a precondition of your funding. The University will require that the successful candidate submit proof of full vaccination or receive an approved exemption as outlined in the Policy and Program. Failure to comply may result in a delay to the start of funding and/or the funding offer may be deemed void resulting in your funding ending without notice.
To Apply	<p>To apply, please forward your application and cover letter to merc@laurentian.ca and reference the Job Identification Number. The application should include: a CV, academic transcripts, contact details and the names of three referees. Applications will be accepted until the position is filled.</p> <p>Laurentian University is an inclusive and welcoming community and encourages applications from members of equity-seeking communities including women, racialized and Indigenous persons, persons with disabilities, and persons of all sexual orientations and gender identities/expressions.</p> <p>Laurentian University is committed to providing an inclusive and barrier free experience to applicants with accessibility needs. Requests for accommodation can be made at any stage during the recruitment process.</p>