UNIVERSITY OF ALBERTA

DEPARTMENT OF CIVIL & ENVIROMENTAL ENGINEERING
JULY 12, 2021

POSTDOCTORAL POSITION IN
Mine Planning Optimization and Design

The Department of Civil and Environmental Engineering is looking to fill a postdoctoral researcher position in the area of Mine Planning Optimization and Design in the School of Mining and Petroleum Engineering. The postdoctoral position is part of an NSERC Collaborative Research and Development grant.

The proposed research program builds on our past research to develop an integrated framework for optimal dynamic relocation of in-pit crusher and slurry system over the mine-life. The overall objective is to gain a fundamental understanding of the impact of incremental relocation strategy of the in-pit crusher on operational efficiency in the presence of uncertainty. To achieve the objective this research aims to develop, implement, verify, and validate a simulation-optimization framework for understanding the long-term and operational impacts of such in-pit crushing system in an open pit mine. The ideal candidate is also expected to assist with various research needs and also training and supervision of graduate students.

We are looking for a researcher to assist with the delivery of this research program by:

- Developing mathematical optimization models for mine planning of open pit mines with in-pit crusher and conveying systems,
- Developing detailed mine plans for the in-pit crusher using commercial mine planning software as bench-marks,
- Supervision and training of PhD students in the same area of research.

Applicants must meet the following criteria:

- The applicant must currently reside in Canada or USA.
- PhD degree with a background in mining engineering or industrial engineering.
- Proficient in using mine planning and design software (Surpac, MineSched, Whittle or experience with similar mine planning tools).
- Hands-on experience using mathematical optimization tools (CPLEX or GUROBI).
- Programming skills in MATLAB or similar environment.

To Apply:
The successful candidate will work in the School of Mining and Petroleum Engineering with Dr. Hooman Askari. Please send a cover letter, CV, the names and contact information (address, phone number and email address) of three referees to hooman@ualberta.ca

Closing date:
Review of applications starts immediately, and applications are accepted until the position is filled.

We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

The University of Alberta is committed to an equitable, diverse, and inclusive workforce. We welcome applications from all qualified persons. We encourage women; First Nations, Métis and Inuit; members of visible minority groups; persons with disabilities; persons of any sexual orientation or gender identity and expression; and all those who may contribute to the further diversification of ideas and the University to apply.