

A Data Driven Based Approach for Fault Location Identification in Mines' Electrical System

This research is set to develop an original hybrid hardware-software package which can detect fault location in difficult to access power lines based on the field measurement data. The main feature of the work is to develop advanced algorithms which can address detection issues in both buried high voltage feeder cables of potash mines and medium voltage cables in underground mining. The project will also contribute to the fault detection/prediction literature by finding innovative methods which enable fault location identification in industrial plants based on limited number of measurements founded on the offline simulations of fast transient signals.



Proponent: University of Saskatchewan
Project Duration: January 2021 to January 2023
Project Cost: **\$314,100**
 IMII Contribution: \$152,100
 Mitacs Contribution: \$150,000
 Industry In-Kind: \$ 12,000



**INTERNATIONAL
MINERALS INNOVATION
INSTITUTE**

IMII is a unique innovation supporting network of mining companies, government departments and agencies, and post-secondary and research institutions, jointly funded by industry and government. It exists to deliver innovations that matter to mining in Saskatchewan.

www.imii.ca