

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.

PROJECT INFORMATION:

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