Automated Mine Maintenance System

Gold mine suffers from high cost of downtime due to scheduled and unscheduled maintenance. Over the past 54 hours, our team developed a data-driven decision-making system that integrates image and equipment condition data and make optimized maintenance schedule. We aim to build a decision-making system that minimize the maintenance cost, considering the trade-off between downtime cost and inspection cost. We use the equipment condition and downtime cost data to build the maintenance model. To improve the model, we build a mobile application to capture equipment image and acquire expert opinion on equipment condition. Our tool will assist and automate the decision process for decision makers and investors in the gold mining industry.