

Smart Lithology Identification: AI-Powered Solution for Mining

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Problem Statement: In traditional mining exploration, geologists inspect drillhole core samples for lithology. However, this method is subjective and costly. To address this challenge, we aim to develop an innovative workflow for accurate, cost-effective lithology identification, enhancing decision-making in the mining industry.

Solution: Using AI technology, our workflow processes data in the Dataiku collaborative platform. We swiftly build an LSTM model for lithology prediction. Quality control is ensured with visualisation. With new data, our model achieves 90% accuracy. This innovative workflow saves \$2.2 million annually and expedites mining decisions.

