

SEG 100 Conference: Celebrating a Century of Discovery

F1

Five Myths of Data Science for Exploration

Kurt House

KoBold Metals, San Francisco, CA, USA

The application of statistical and scientific computing to all industrial sectors and areas of study has accelerated appreciably over the last decade. Mining companies have been heavily investing in data science to improve upstream and processing operations. Yet, to date, mineral exploration activities have received proportionally less data science investment. KoBold Metals is a full-stack battery metals exploration company developing and deploying machine learning and other scientific computing techniques to improve the efficacy and efficiency of exploration programs. In this talk, we'll address five common misconceptions about the application of data science to mineral exploration: (1) there isn't sufficient data, (2) prospectivity mapping is the principal output, (3) machine learning is a black box, (4) data science should be mostly applied for drill targeting, and (5) there's a tension between physical models and statistical models.