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FACT SHEET to the research project MLGT

SHORT TITLE / ACRONYM

MLGT

LONG TITLE

Machine Learning in Geotechnics

DESCRIPTION

MLGT deals with the application of machine learning in general and deep learning in particular for geotechnical problems.

The current focus of the project is on applying artificial neural networks (ANN) in a supervised manner for classification and prediction of tunnel boring machine data. ANNs are seen as well suited for this problem since they have shown great capabilities in solving non-linear problems and tackling complex tasks in other scientific disciplines.

Since the goal of MLGT is to explore the applicability of different techniques of machine learning on a variety of geotechnical fields, future endeavors include: testing unsupervised- and reinforcement learning, applications in kinematic block analyses, applications on rock mechanical laboratory data...

PROJECT COORDINATOR

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