Generalized Regression Neural Networks for Cavities Depth Estimation using Microgravity Data, Case Study: Kalgольме Gold

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Summary:
In this paper Generalized Regression Neural Network methods (GRNN) are used for depth estimation of cavities from microgravity data and are shown to be faster than MLP neural networks with less data required for the training. The method has been tested for both synthetic and real microgravity data from an open pit in Kalgольме Gold Mine, West Australia, and the results showed good accuracy of GRNN for depth estimation of cavities. Once trained for this type of target the method can automatically determine parameters for similar geometrical targets.