



# NEURAL NETWORKS FOR DETERMINATION OF SUBSURFACE TARGETS IN MULTI LAYER SOIL STRUCTURE

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## Abstract

*This paper results the research carried on the 2D resistivity inversion problem, where resistivity distribution is determined from the apparent resistivity measurements using the Artificial Neural Networks. Neural Network(NN) is trained with the synthetic data generated using a 56 multi electrode Wenner array with 1m electrode spacing. The geoelectrical model studied show encouraging results for the applicability of the well trained NN's as a fast 2D resistivity inversion tool for field resistivity measurements.*