



### Use of artificial intelligence methods to solving problems in oil production industry

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*Abstract:* The general approach to engineering of systems in oil and gas industry from the aspect of their automation and use of information technologies including design and experiment result analysis on the base of mathematical models requires involving newest technologies of artificial intelligence to obtain the most effective results. In this paper application of artificial intelligence methods such as neural networks for optimization of drilling processes and automation of log curves digitization has been proposed. A hybrid neural network on the base of radial basis network learning by k-means algorithm has demonstrated the highest efficiency for solution of these problems of classification and pattern recognition.

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