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Evolutionary approach to medical ultrasound image processingn

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It is considered the problem of ultrasound medical images processing using genetic algorithms. Ultrasound images of the internal carotid artery at B-mode are used as the training set. The set of filters and their optimal sequences are designed. We performed an analysis to determine if there is an association between filters sequences and images texture parameters. The results of this analysis will help to improve image quality and detection of pathologies [1].

- [1] T.Belikova , V.Skobtsov Analysis of genetic algorithm modifications in the problem of filtering ultrasound images *Journal of Kherson National Technical University* **1(44)**, (2012), p.331-338.