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WAVELET NEURO-FUZZY HYBRID SYSTEM OF NONLINEAR ESTIMATION

The article concentrates on synthesis of hybrid system of nonlinear estimation on the basis of wavelets, neural networks and fuzzy systems for their application in navigation information processing. The current research on wavelets, neural networks and fuzzy systems is focused on scheme of their union into a hybrid estimation system. The authors of the article proposed a mathematical model and developed algorithms and software of the hybrid estimation system for the MatLab environment, which can be used for synthesis of self-organizing system for estimating nonlinear dynamic signals of a complex structure.
Keywords: wavelet neuro-fuzzy hybrid system, estimation, navigation.