

Informatika i sistemy upravleniya. – 2021. – No. 4(70). – P. 3-12.

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CONSTRUCTION OF A DATA CLUSTERING MODEL EXEMPLIFIED BY DEMOGRAPHIC INDICATORS OF THE FEFD REGIONS

The article deals with the problem of constructing a model for classifying the regions of the Far Eastern Federal District on the basis of demographic data with the use of machine learning algorithms - t-distributed Stochastic Neighbor Embedding, K-means and self-organizing networks. Column diagrams and heat maps of correlation coefficients are built for demographic indicators. It is proposed to replace demographic indicators with rank values. The effect it has on the classification results is studied. The classifier has been built on the basis of a self-organizing network, that allows the regions of the Far Eastern Federal District to be classified as belonging to one of the classes: depressed, satisfactory or good.

Keywords: demographic indicators, - t-distributed Stochastic Neighbor Embedding, self-organizing networks, K-means clustering.

DOI: 10.22250/isu.2021.70.3-12

For citation:

Bezrukov N.S., Polyanskaya E.V. CONSTRUCTION OF A DATA CLUSTERING MODEL EXEMPLIFIED BY DEMOGRAPHIC INDICATORS OF THE FEFD REGIONS
// *Informatika i sistemy upravleniya. – 2021. – No. 4(70). – P. 3-12.*