

NEURAL NETWORKS IN ECONOMIC DATA ANALYSIS

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ABSTRACT

Neural Network based Machine Learning algorithms are the most developing branch of Artificial Intelligence and programming today. These Neural Networks frequently used in data analysis, face detection, classification, pattern detections etc. The aim of this project was to develop a simple but flexible NN system with graphical interface, which could demonstrate the power of this method mostly in real economical and financial databases. The Python and Linux based application has several setup possibilities and was tested in various databases with success, and capable to introduce into the economics education. With the program the user will able to fit the NN to the actual database, and can find the relationships or mistakes with ease. The application use the black-propagation algorithm, and works with CSV data recently. The output can be seen graphically, but the final setup of the NN results can be saved for future utilization as well. The system is suitable for teaching and learning due to its easy fine tuning and quick setup.