

In the presented work, we design and implement a mouse gesture recognition application. The program integrates transparently with the operating system, thus allowing existing unmodified Windows applications to be controlled by gestures. In an editor provided, the user is able to define a custom set of gesture patterns that the program automatically learns to recognize. The recognition algorithm is based on a preprocessing phase and two different gesture classifiers: back-propagating artificial neural network and k-nearest neighbors. The user is allowed to configure both general and application specific gesture mappings. These specify the commands to be triggered by the individual gestures. Several new features and improvements have been proposed for further development.