## **Abstract**

Humans communicate one way to another using combination of speech and movement. The movement is usually made with hand, head or another part of human body. The point is a movement is made by humans to communicate. Usually humans communicate/interact with computer are by keyboard and mouse.

Human computer interaction can be done by mouse gesture too. The concept is as simple as this, a computer user does some movement with mouse on the space that is fixed. Then the system will check the model of that movement and will do an action if the movement is recognized by the system.

Training is needed to recognize the movement signature pattern is based on Neural Network Backpropagation. The input from user will be turned into a matrics and will be identified to recognize the owner from signature. From examination doneto be got 30% data test in refusing by system and 70% data test accepted by system.

**Keywords**: *mouse gesture*, neural network backpropagation, human computer interaction.