This article describes a method of an off-line signature recognition by using hough transform to detect stroke lines from signature image. The hough transform is used to extract the parameterized hough space from signature skeleton as unique characteristic feature of signatures. In the experiment, the Back Propagation Neural Network is used as a tool to evaluate the performance of the proposed method. The system has been tested with 70 test signatures from different persons. The experimental results reveal the recognition rate 95.24%