MICROPROCESSOR BASED SPEECH VERIFICATION SECURITY SYSTEM

Prepared by: Lee Soon Wei

ABSTRACT

Microprocessor based Speech verification Security System is a quite high technology system that can provide security protection and normally can be applied at gate of a house, security room, coffer or even Speech-driving menu navigation. A database is created for different voices of different authorized persons. Both software and hardware development are implemented in this project. The speech signal given as input will be verified using speech recognition technique with the aid of MATLAB software. Some of the algorithms like Mel Frequency Cepstral Coefficient (MFCC) and Vector Quantization (VQLBG) are applied for speech identifying and matching in this project. Based on the results obtained, data was send to Parallel Port of the computer, it access the relay to activate driver circuit to control different devices.

Overall, the project is working successfully and completed. The quality of the received speech signal may be improved for accuracy as the speech signal will directly affect the quality of performance.