

Abstract

Speech recognition system needs acoustic model and language model. Acoustic model can be acquired from speech files that have been converted to HMM by HTK. Statistical language model using Indonesian text corpus, and then it is converted to trigram language model, for syntactic language model, we used Julius to make grammar. After acoustic model and statistical and syntactic language model are acquired, we used Julius in the speech recognition system.

To combine language model and 16kHz acoustic model, we get the highest correct sentence 82%, word correct 94.7%, and word accuracy 94.7%, from statistical language model word accuracy 93.43% and word accuracy from syntactic language model is 82.63%.

Keywords: LVCSR, julius, htk, language model.