SPEECH RECOGNITION SYSTEM OPTIMIZATION WITH LEVENSTHEIN EDIT DISTANCE FOR ONLINE FOREX TRADING

Nama : Andi Iwan Nurhidayat  
NRP : 2211 205 015  
Pembimbing : Dr.I.Ketut Eddy Purnama,S.T.,M.T.  
Co-Pembimbing : Dr.Surya Sumpeno,S.T.,M.Sc.

ABSTRACT

Speed, comfort and convenience are important in online forex trading. up to now, the MetaTrader 4 software does not yet support in speech recognition for its transaction. MetaTrader 4 Software provide facilities in the form of expert advisors, scripts and indicators that can be created or adapted to the needs of traders. Facilities provided by the MetaTrader 4 must be built using MetaQuotes Languages (MQL). MetaQuotes Languages (MQL) has limited functions and libraries so that require libraries from other platforms.

Several previous studies have shown that, the application of speech recognition automatically provide the ease and speed with a better time operation can be manual or semi-manual on the tools and applications used.

In this study, using a socket for communication with MetaTrader 4 software and HTTP Request / Response for communication with google speech engine. Based on the trials that have been carried out optimization of the speech recognition results of the Google Speech API with Lavenstein Edit Distance algorithm improves accuracy of 55% to 80%. And with the speech recognition for online forex transactions gives faster results 4 compared with semi-manual operation.

Key Words: Forex, Google Speech Api, Expert Advisor, Script, Indicator, Socket, HTTP Request / Response