

Phoneme based Myanmar text to speech system

Chaw Su Hlaing

87chawsuhlaing@gmail.com

University of Computer Studies, Mandalay, UCSM

Aye Thida

ayethida.royal@gmail.com

University of Computer Studies, Mandalay, UCSM

The text to speech (TTS) is one of the recommended research level topics in the domain of natural language processing and speech processing. In this day and age, the usage of mobile phones is extremely increasing so the researchers focus on speech processing on mobile devices. TTS system for mobile phones is difficult to implement as they have limited storage capacity and computing performance. Therefore, phoneme based Myanmar TTS (MTTS) system is proposed for resource limited devices. In this paper, rule based Myanmar number conversion and new phonological rules are proposed. For speech generation, firstly, phoneme speech database in which there are only 133 phoneme units is created and then the new phoneme concatenation algorithm is applied. Moreover, each module of MTTS system is presented in detail with their respective experimental results and the system achieved the acceptable level of intelligibility although naturalness is still needed to achieve the satisfactory level according to these results.