ABSTRACT

The Grapheme-to-phoneme (G2P) conversion plays an important role in speech synthesis and to build a state-of-the-art Automatic Speech Recognition (ASR) system. It is used to enrich the pronunciation lexicon. The term speech Synthesis refers to the artificial production of human. A Text-To-Speech (TTS) Synthesizer is a computer based system that should be able to read any text aloud, whether it was directly introduced in the computer by an operator or scanned and submitted to an Optical Character Recognition (OCR) system Speech synthesis systems are often called text-to-speech (TTS) systems in reference to their ability to convert text into speech. The ultimate goal of such systems is to produce human-like speech output.

TTS technology has a wide range of applications wherever voice output is useful. Typical examples of such include screen-readers, Gaming applications, and use in mobile devices.

In general, it refers to a difficult problem, because the same grapheme may correspond to different phonemes depending on the context. The G2P module is used in various applications in human language technologies such as speech synthesis (generating the pronunciation of given text input) and speech recognition (constructing a pronunciation dictionary).

My project entitled "**Rule Based G2P Conversion for Bangla**" is a module basically aims at making a study about the rules for the conversion of Grapheme to phoneme in Bangla language for Bangla TTS.