

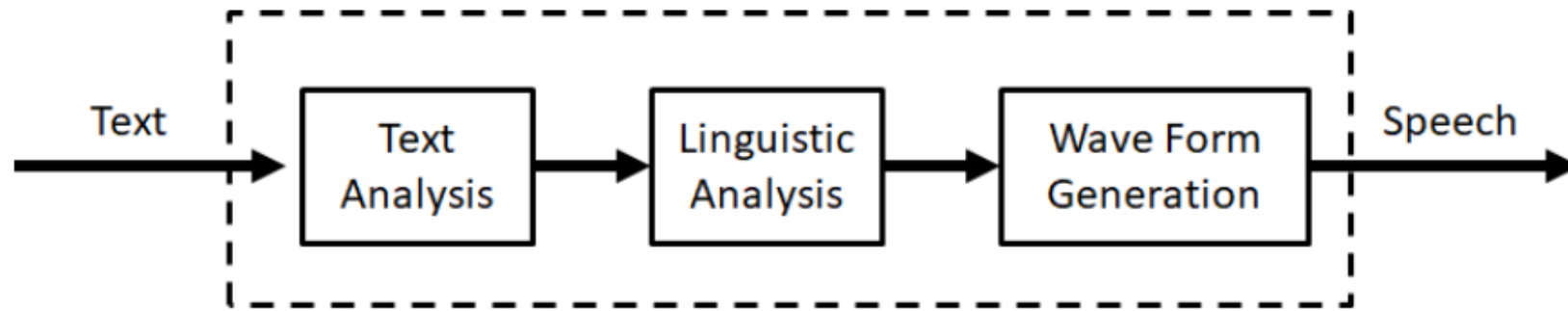
Speed X3



SPEECH SYNTHESIS

Speech Synthesis (Text-to-Speech)

- Speech synthesis is the production of artificial human speech by a computer or other machines.
- Also known as a text-to-speech (TTS) system, where normal language text is converted into speech.



Speech Synthesis (Text-to-Speech) [offline]

- Festival - <http://www.cstr.ed.ac.uk/projects/festival/>
- ROS sound_play - http://wiki.ros.org/sound_play
 - Tutorials - http://wiki.ros.org/sound_play/Tutorials
- Command line operation
 - \$ roscore
 - \$ rosrun sound_play soundplay_node.py
 - \$ rosrun sound_play say.py "hello world"
- Source code implementation
 - rchomeedu_speech/scripts/**sound_test.py**
 - \$ roslaunch rchomeedu_speech **sound_test.launch**

Speech Synthesis (Text-to-Speech) [offline]

Festival Add Voices

- Reference - <https://ubuntuforums.org/showthread.php?t=751169>
- Install by Debs
 - `$ sudo apt-get install festvox-don festvox-kdlpc16k festvox-rablpc16k`
 - Voice files location `/usr/share/festival/voices/english/`
- Install by Voice Files
 - Download voice files
 - http://festvox.org/cmu_arctic/packed/
 - <http://festvox.org/packed/festival/2.5/voices/>
 - Extract files and put in `/usr/share/festival/voices/english/`
 - Arctic voices add “_clunits” at the end of the folder name
 - Female voices: `cmu_us_axb_cg`, `cmu_us_clb_cg`, `cmu_us_clb_arctic_clunits`, `cmu_us_slt_arctic_clunits`
- Command line operation
 - `$ roscore`
 - `$ rosrund sound_play soundplay_node.py`
 - `$ rosrund sound_play say.py "Hello!" voice_<voice name>` (e.g. `voice_don_diphone`)