

Neural Text-to-Speech

Russel Shawn Dsouza



Electronics and Communications Engg.
National Institute of Technology Karnataka
Surathkal, India - 575025

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Speech synthesis

Artificial production of human speech

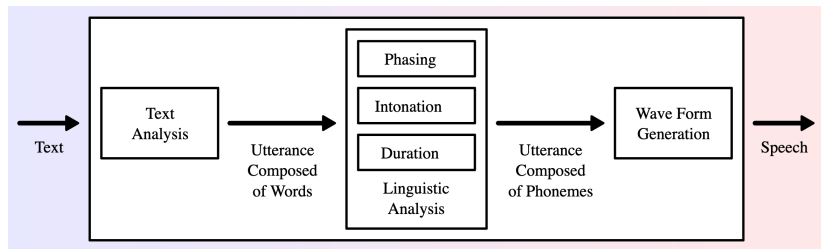


Figure: A typical text-to-speech system

History of speech synthesis

Concatenative

Parametric

Neural

Approaches in Neural text-to-speech

LSTM

WaveNet

WaveNet based

WaveNet

A deep neural network for generating raw audiowaveforms.

- ▶ Probabilistic
- ▶ Autoregressive
- ▶ Beats all previously known methods



Figure: Time domain representation of 1 second of generated speech

WaveNet: Architecture

WaveNet: Pros and Cons

FloWaveNet: Architecture

FloWaveNet: Training

FloWaveNet: Reported results

FloWaveNet: Improvements over WaveNet

Neural TTS: The future

Summary

Conclusion