

ECE556 FINAL EXAM INCLUDED TOPICS FROM THE LECTURES:

Lecture-6 : Speech coders

CH-2 : Speech production

2.3. Source Filter Model

CH-3:Speech Analysis Tech.

3.6. Windowing

CH-4: LP Vocal Tract Modelling

4.2. Estimation of LP parameters

4.2.1. Autocorrelation method

4.2.2. Covariance Method

4.3.2. Line spectral Frequency

CH-5: Pitch extraction

5.1. AC pitch estimation

5.2. Cepstral pitch Estimation

5.4 Pitch Tracking (5.4.1., 5.4.2 included)

Lecture-7:Vocoders

CH-9: Voice coding concept

9.1. Channel vocoder (9.1.1. included)

9.2. Formant vocoder

9.3. Sinusoidal vocoders (9.3.1., 9.3.2. included)

9.4. LP vocoder

CH-10 : Linear Prediction Analysis by Synthesis

10.1 : Analysis by Synthesis Estimation of Excitation

10.2: Multi-Pulse Linear Prediction Coder

10.4. Code Excited Linear Prediction Coder (10.4.1 included)

CH-11: Mixed Excitation Coding

11.1 : Multi-Band Excitation Vocoder

11,1,1 : Multi-Band Excitation Analysis

11.1.2 : Multi-Band Excitation Synthesis

11.2 : Mixed Excitation Linear Prediction Coder

Lecture-8: Quantization

CH-7: Quantization and Waveform Coders

7.4. Adaptive Quantization

7.4.1: Adaptive Delta Modulation

7.4.2: Adaptive Differential Pulse Code Modulation

7.5 Vector Quantization

Note: If a title/ subtitle is not written clearly in the above list, assume that it is excluded from the final exam.