

EN.520.680 Speech and Auditory Processing by Humans and Machines

Homework 1

Due: February 15th

Does the information transfer evaluation give different information about a system than a simple error rate? Think about ways of emulating different error levels and error patterns as responses by different systems to stimuli from a given number of categories and a given overall number of stimuli to support your answer. Examples of such system can be

1. One that chooses a random response irrespective of the stimuli
2. One that is completely noise-free and always correct.

Evaluate the responses by computing error rates and information transfer from confusion matrices. Comment on your observations. **(Points:50)**