

LEARNING OBJECTIVES - Lecture 19 (Rate-Distortion Theorem: Converse and Examples)

After attending lecture and completing the associated readings, you should be able to:

1. Set up the basic lossy source coding problem, including definitions of DMSs, single-letter distortion functions and extensions, encoding/decoding functions, and operational definition of rate-distortion.
2. State and prove the converse to the rate-distortion theorem.
3. Find the rate-distortion function for the Bernoulli source under Hamming distortion, and similar settings.