Source Coding

Component
École Nationale Supérieure d'Électrotechnique d'Électronique d'Informatique d'Hydraulique et des Télécommunications

In brief

> **plugin.odf-inp:PLUGINS_ODF_COURSE_NBHOURS_TXT:** 3 CM de 1

> **Code:** N7EN03C

Presentation

Objectives

Understand what is source coding: lossless or lossy coding methods: lossless linked to information theory and lossy methods based on signal processing, with the 2 big families, predictive coding and transform coding.

Description

I. Introduction

II. Lossless coding : basis (information theory in short), Huffman coding, based-dictionary methods, arithmetic coding

III. Lossy coding: the importance of scalar quantization

IV. Lossy coding: predictive coding

V. Lossy coding: transform coding

Pre-requisites

Probabilities. Matrix computation

Useful info

Place

> Toulouse