Information Theory

Lecture notes

Introduction

Organization

Professors:

- Lectures: Nicolae Cleju
- Laboratories: Irina Pavel

Grades

- Final grade = 0.6 Exam + 0.4 Overall semester grade (Lab + Tests)

Time schedule

- 14 weeks of lectures (3h each)
- 14 weeks of laboratories (2h each)
- Office hours: — (best by appointment)

Exercises & Tests

- ▶ There will be 2 semester tests during lectures, approximately in 5th and 10th week
  - ▶ we'll discuss the schedule during classes
- ▶ Exam: exercises (two thirds) & theory questions (one third)

Course structure

1. Chapter I: Discrete Information Sources
2. Chapter II: Source Coding
3. Chapter III: Discrete Transmission Channels
4. Chapter IV: Error Control Coding

Bibliography

1. **Elements of Information Theory, Valeriu Munteanu, Daniela Tarniceriu, Ed. CERMI 2007**
2. *Elements of Information Theory*, Thomas M. Cover, Joy A. Thomas, 2nd Edition, Wiley 2006
3. *Transmisia si codarea informatiei*, lectures at ETTI (Romanian)
4. *Information and Coding Theory*, Gareth A. Jones, J. Mary Jones, Springer 2000

▶ Lecture notes (draft version) are available on Github.
▶ All materials are on Github.