uc3m Universidad Carlos III de Madrid

Data Analysis

Academic Year: (2023 / 2024) Review date: 25-05-2022

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: PATRICIO GUISADO, MIGUEL ANGEL

Type: Electives ECTS Credits: 3.0

Year: 4 Semester:

SKILLS AND LEARNING OUTCOMES

Complement the basic, transversal and compulsory knowledge of the Degree according to the student's preferences.

DESCRIPTION OF CONTENTS: PROGRAMME

- 1. Introduction to Data Analysis and Data Mining
- 2. Machine learning with numeric techniques
- 3. Numerical learning
- 4. Evaluation of Machine Learning

Models

- 5. Attribute analysis
- 6. Methodology of data mining projects
- 7. Introduction to other advanced techniques (combination, SVM, Fuzzy systems, GAs)

LEARNING ACTIVITIES AND METHODOLOGY

Seminars and lectures supported by computer and audiovisual aids.

Practical learning based on cases and problems, and exercise resolution.

Individual and group or cooperative work with the option of oral or written presentation.

Individual and group tutorials to resolve doubts and gueries about the subject.

Internships and directed laboratory activities.