Data Mining

a.y. 2018-2019

Anna Monreale

Dino Pedreschi

Computer Science Department, University of Pisa

Data Mining

Data Mining (12 CFU) – Code: 420AA

- DM I: **Foundations of Data Mining** (first semester)
- DM II: **Advanced topics on Data Mining and case studies** (Second semester)
- For students in **Data Science & Business Informatics**

Data Mining (9 CFU) Code: 309AA

- For students in **Computer Science**

Data Mining (first semester)

- **Instructors**
  - Dino Pedreschi, pedre@di.unipi.it
  - Anna Monreale, anna.monreale@unipi.it

- **Teaching assistant**
  - Riccardo Guidotti, guidotti@di.unipi.it
- **Classes**
  - Monday   14:00 - 16:00   Room C1
  - Wednesday 14:00 - 16:00   Room C1
  - Friday   11:00 - 13:00   Room A1

- NO Class for Students from Data Science & Business Informatics after mid of November

- After mid of November classes are dedicated to Computer Science Master Degree

Data Mining

- **Web Page**
  - http://didawiki.di.unipi.it/doku.php/dm/dm.2017-18
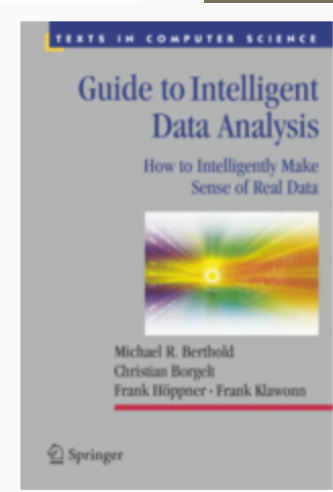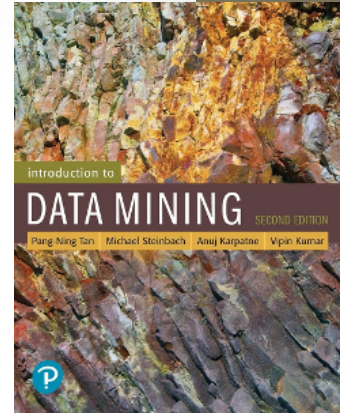
- **Learning Material**

  - **Textbook:** Pang-Ning Tan, Michael Steinbach, Vipin Kumar **Introduction to DATA MINING** Addison Wesley, ISBN-13: 978-0-13-312890-1, 2018

  - **Textbook**: Berthold, M.R., Borgelt, C., Höppner, F., Klawonn, F**. GUIDE TO INTELLIGENT DATA ANALYSIS.** Springer Verlag, 1st Edition., 2010. ISBN 978-1-84882-259-7

- **Slides of the classes**

- **Data mining software**
  - **KNIME:** The Konstanz Information Miner. Download page
  - **Scikit-learn**: python library with tools for data mining and data analysis

Exam

- A **written exam**, with exercises and questions about methods and algorithms presented during the classes.
  - It can be substitute with the first and second mid-term tests (November and December)

- A **project**, consisting in exercises that require the use of data mining tools for analysys of data. Exercises include: data understanding, market basket analysis, clustering analysis and classification.
  - The project has to be performed by max 3 people.

- An **oral exam** that includes: (1) discussing the project report with a group presentation; (2) discussing topics presented during the classes, including the theory of the parts already covered by the written exam.

- **Oral exam is not mandatory if your written exam is passed by the mid-tests**

Mailing list

- Send as soon as possible a mail to anna.monreale@unipi.it with the following data:
  - subject: "DM"
  - text:
    - name
    - surname
    - student-id

- You will be included in a mailing list of urgent news