Data Mining Course Overview

Anna Monreale

Computer Science Department

a.y. 2021 - 2022



Data Mining

Data Mining (9 CFU) Code: 309AA

- Only for students in Computer Science
- Students from Data Science & BI and Informatica Umanistica (Data Mining: 420AA)



Information

Instructors

- Anna Monreale
 - Computer Science Department, Room 374/DO
 - Email: <u>anna.monreale@unipi.it</u>
 - Office hours: Wed 11:00-13:00 Online using Teams (Appointment by email).

Timetable

– Wednesday14:00 - 15:45

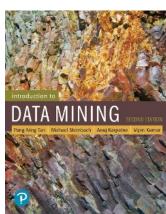
- Thursday 14:00 - 15:45

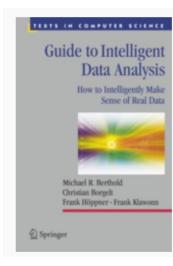
– Friday 09:00 - 10:45



Data Mining

- Web Page
 - http://didawiki.cli.di.unipi.it/doku.php/magistraleinformatica/dmi/start
- Learning Material:
 - Textbook: Pang-Ning Tan, Michael Steinbach, Vipin Kumar
 Introduction to DATA MINING Addison Wesley, 2018
 - Textbook: Berthold, M.R., Borgelt, C., Höppner, F., Klawonn, F. GUIDE TO INTELLIGENT DATA ANALYSIS. Springer Verlag, 1st Edition., 2010.
- Slides of the lectures, Python Notebooks
- Data mining software
 - Scikit-learn: python library with tools for data mining and data analysis







Exam

Project

- Given a set of data students will address the tasks required
- Groups of 3 people (to be defined within the end of Sept)
- The dataset will be released during the first week of October
- Two deadlines: the first one around the end November and the second one before the end of the year.
- To be delivered: source code, report on the analysis

Paper presentations:

- Papers made available by the teacher
- Presentation in December during the classes
- Students need to answer questions from teacher and other students
- It is not mandatory

Oral

- Project presentation (with slides) 10 minutes
- Open Questions on the program and on the details of project
- Students who decide to skip the paper presentation need to answer questions on the whole program



Mailing list

- We will publish in Teams a shared document where each student need to provide the following data:
 - name
 - surname
 - student-id (if you have one)
 - Email

