

Data Management Syllabus Year 2018/2019
Prof. Andrea Maurino

At the end of the module students will be able to select, design and query a database (relational or not) according to their application needs.

Students will be able to use a NoSql database management system to collect, store and query semi structured data

Contents

data type

nosql models and architecture

big data architecture

big data engine

data lifecycle

Detailed program

1. NoSQL models
 - 1.1. Cap theorem
 - 1.2. Document based system
 - 1.3. Graph db
 - 1.4. key value and columnar models
2. Data architecture
 - 2.1. Replication
 - 2.2. Fragmentation
3. Architectures for big data analysis
 - 3.1. Hadoop and its main components