# Data Management for Big Data – Part I

Andrea Brunello
andrea.brunello@uniud.it

February, 2020



#### Introduction

Andrea Brunello, Postdoctoral Researcher at the University of Udine, and member of the Data Science and Automatic Verification Laboratory https://datasciencelab.dimi.uniud.it/

My research interests are in the fields of Explainable AI, Machine Learning applied to Healthcare / Virtual Sensing / Indoor Positioning and, broadly speaking, Data Science.

Currently we have many thesis proposals available, so take a look at our website!



### Content outline

We are going to spend 24 hours together, partitioned into 6, 4-hour lectures.

We are going to talk about these topics:

- Databases and DBMSs
- Relational model
- Entity-Relationship model
- Database design: normalization
- Relational Algebra and SQL
- Concurrency and transactions

Materials are available at https://github.com/dslab-uniud/teaching/



## Other parts

#### Held by Dr. Dario Della Monica:

- Part II: distributed systems (24h)
- Part III: introduction to Big Data (24h)