# Data and Data Models

- *Data* is a **collection of values** that convey **information**

- A *data model* is a collection of high-level data description

- Different data models for different purposes
  - Ex) Alice and Bob is friend
    - ► First-order logic: $Friend(Alice, Bob)$

    - ► Relational:

    | Person1 | Person2 |
    |---------|---------|
    | Alice | Bob |
    | Bob | Alice |

    - ► Graph:



*Friend*

Alice    Bob

*Friend*