

avd

Teaching team

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Data analysis and visualization

Usual workflow

- 1. Gathering and extraction**
- 2. Pre-processing**
- 3. Analysis**
- 4. Visualization**

Sources

- **ontologies**
- **dictionaries**
- **web**
 - **wikipedia, news websites, social networks, ...**
- **books**
- **pre-compiled data: PORDATA, INE, dados.gov, public datasets**
- **any text document(s)?**

Visualization elements

- **charts**
- **word clouds**
- **maps**
- **graphs (networks)**
- **infographics**

Tools and technologies

- **Tableau**
- **Google Sheets**
- **Python**
- **Command line tools: wget, curl, cut, grep, ...**
- **Google Maps**
- **Graphviz**
- **Sublime Text**
- **...**

Students

Getting decent tools on Windows

One of:

- **<https://tutorials.ubuntu.com/tutorial/tutorial-ubuntu-on-windows>**
- **Chocolatey**
- **Virtual machines**
- **Dual boot**
- **<https://www.howtogeek.com/249966/>**

Evaluation

- **2 trabalhos práticos**

Exercise

Create a map showing the Nobel laureates in Literature allowing to filter by genre.