VISUALISATION INTERACTIVE DE DONNÉES

INTERACTIVE DATA VISUALIZATION

Lecturers: Romain VUILLEMOT

| Lecturers : 0.0 | TC : 28.0 | PW : 0.0 | Autonomy : 0.0 | Study : 0.0 | Project : 0.0 | Language : FR

Objectives

This course aims at presenting the tools and methods located at the ends of the Big Data processing chain: visually exploring data before modeling them, visually communicating analysis results. This step is crucial for data analysts, but also for decision makers who need to understand complex results without being experts, through intuitive graphical interfaces and dashboards.

Keywords : Data visualization, multidimensional projection methods, graph layout algorithms, benchmark and visualization software development, testing methodology, JavaScript, Observable Notebooks.

Programme

- Introduction to data visualization;
- Principles of visual encoding, perception, cognitive principles and design;
- Typology of graphics, interaction and animation techniques;
- Case studies, paper prototyping;
- Algorithmic aspects and software architectures of visualization;
- Case studies and use of industry standard tools (Tableau, Raw, Google Fusion Table);
- Introduction and advanced JavaScript;
- Web visualization project.

Learning outcomes

Independent study

Objectifs :

Méhodes :

Core texts

Tamara Munzner, *VISUALIZATION ANALYSIS AND DESIGN*, CRC Press, 2014

Assessment

Written exam and web project (+ defense)