Data Visualization for Researchers: theory and new approaches to enhance communication and dissemination

A.Y. 2024/2025

Lecturer

Chiara Ceccarini

Department of Computer Science and Engineering (DISI), University of Bologna email: chiara.ceccarini6@unibo.it

About the Course

This course aims to present the fundamentals of data visualization to empower students with the skills and insights necessary for creating effective visualizations that enhance communication and the dissemination of data and scientific results. Focusing on the principles of data visualization, participants will explore diverse techniques to transform information into data representations, combining theoretical lessons with hands-on group activities. The theoretical sessions cover the fundamentals, techniques, best practices and new trends in data visualization, allowing participants to gain a solid understanding of the field. Complementing the theoretical aspect, practical group activities offer participants the chance to apply learned concepts in real-world scenarios. Finally, the course will present some ethical considerations about Data Visualization.

The final exam will require students to create data visualizations using open data, analyze their findings, and present them in a concise presentation, explaining their choices and insights (more information during the course).

Schedule

The course is organized as 4 lectures for 12 hours in total. The lectures will be held in person in the lecture rooms at Cesena Campus (Via dell' Università 50, Cesena), based on the following schedule:

• **10/04**: 15:00 - 18:00 (AULA 3.11)

```
• 11/04: 15:00 - 18:00 (AULA 3.10)
```

Enrollment

Please sign up for the course via the form at https://forms.gle/k7BhvPfcuq5kAcPAA

[•] **16/04**: 15:00 - 18:00 (AULA 4.1)

[•] **14/05**: 15:00 - 18:00 (AULA 4.1)