

Checklist for good graphics

Concept : Presentation of experimental results

Method : Checklist

Introduction

This short note is an adaptation of chapter 10 from the Jain's book *The Art of Computer Systems Performance Analysis : Techniques for Experimental Design, Measurement, Simulation, and Modeling* [1]. The evaluation criteria have been reorganized by main themes.

Keep always in mind : Who is the reader and why should he read the graphic ?

Hints for the design of a good graphical representation.

1. Minimize efforts of the reader ;
2. Maximize information ;
3. Minimize *ink* ;
4. Use traditional conventions
5. Make several representations, before choosing the more adequate.

Some classical errors

1. Too many graphical objects
2. Confusing scales
3. Cryptic notations
4. Non necessary informations
5. Unadapted scales

Principles

Occam's Razor If two representations contain the same information, choose the simpler one.

Completion (Dijkstra) When you cannot remove any simple object from the representation, then it is complete.

Common sense Use an adapted sophistication level.

From Jean-Yves Le Boudec [2].

Références

- [1] Raj Jain. *The Art of Computer Systems Performance Analysis : Techniques for Experimental Design, Measurement, Simulation, and Modeling*. John Wiley & Sons, 1991.
- [2] Jean-Yves Le Boudec. *Performance Evaluation of Computer and Communication Systems*. EPFL Press, Lausanne, Switzerland, 2010.