

Research Methods in computer science

Fall 2013

Lecture 11

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October 3, 2013

Agenda

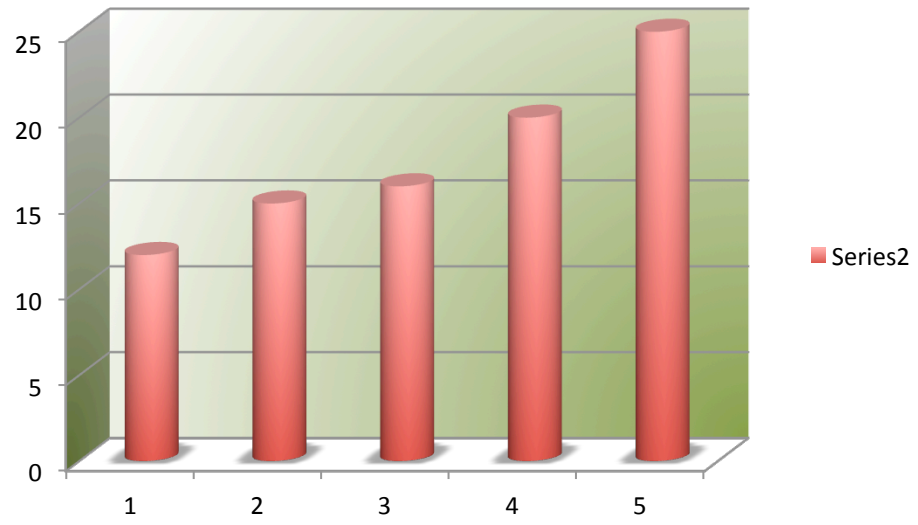
Research Conference Updates

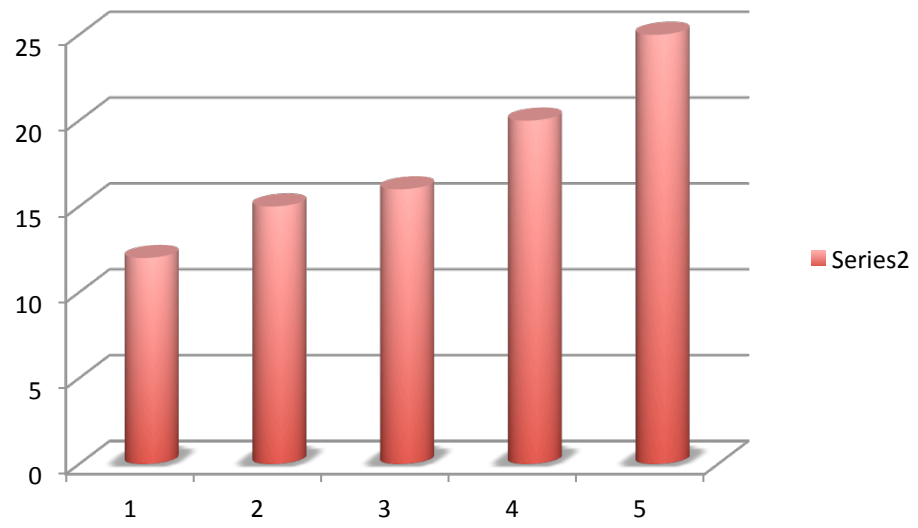
Graphs

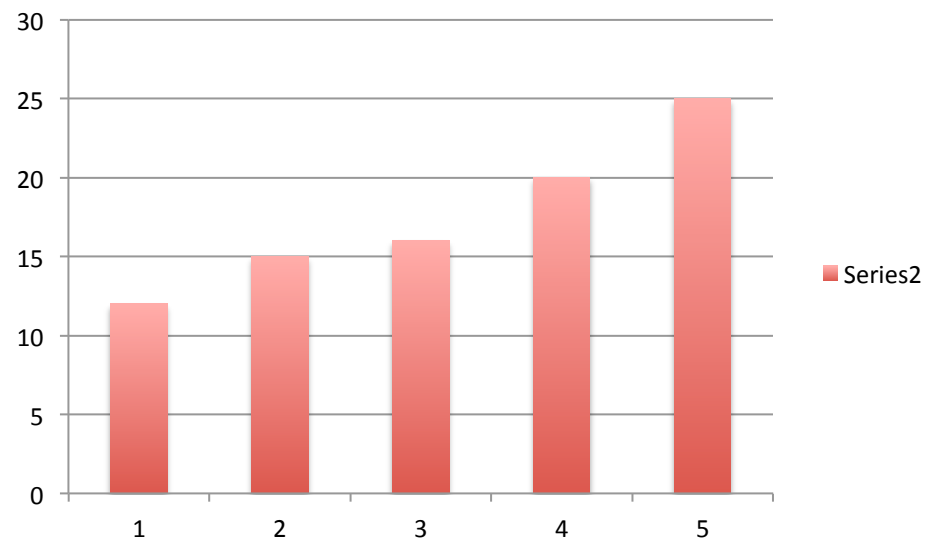
HW6 feedback

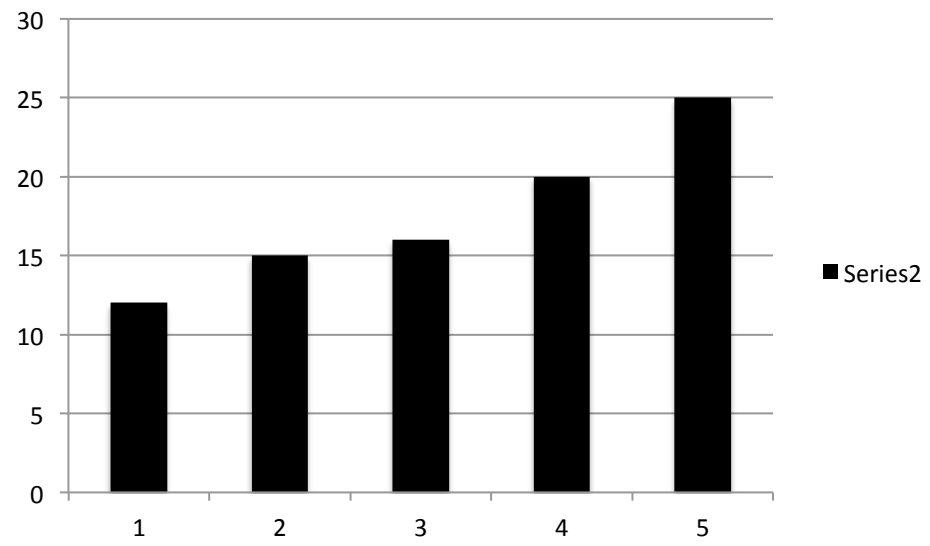
HW7

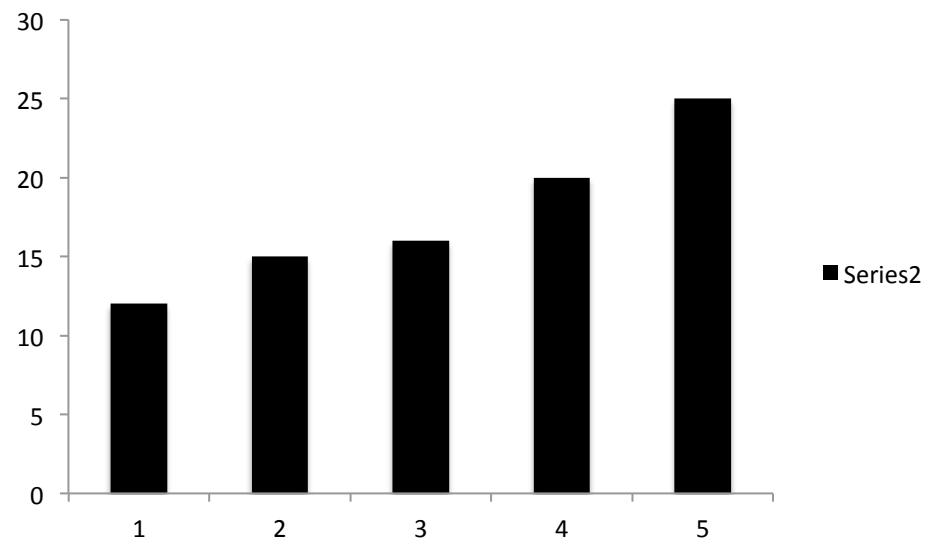
Look of a graph

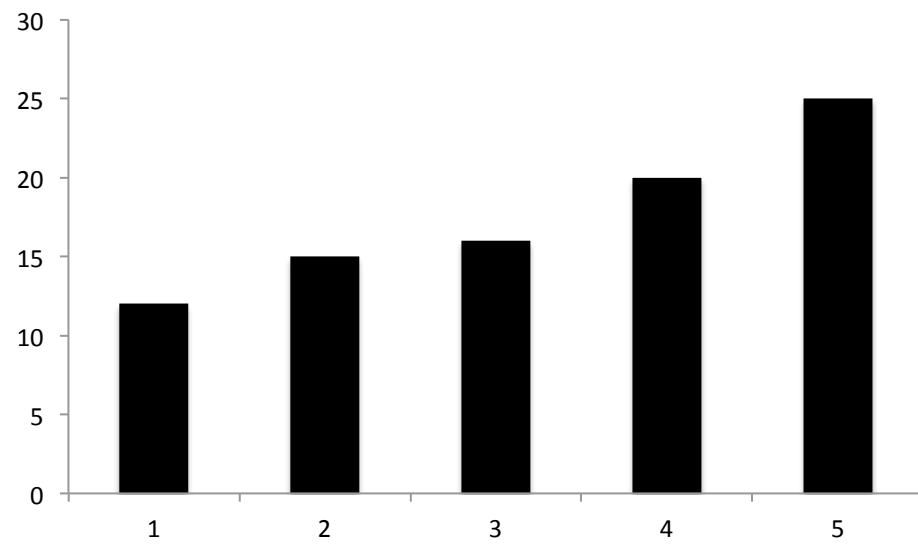


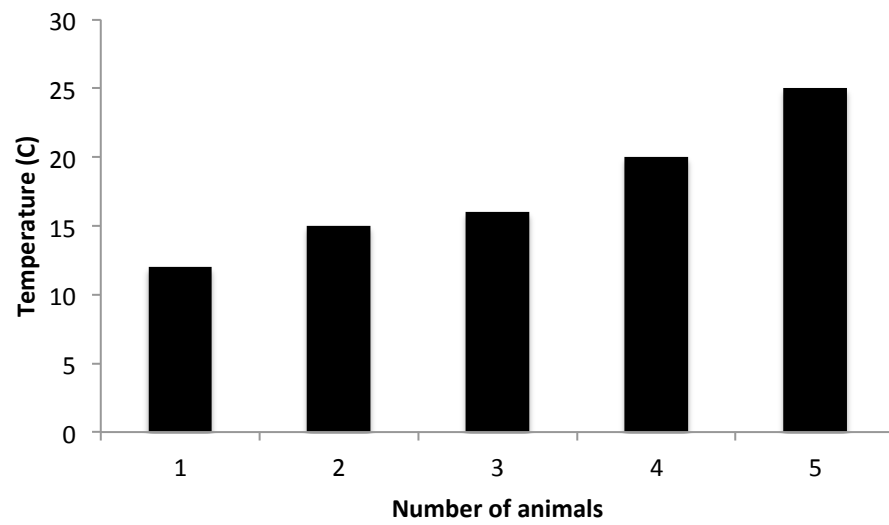


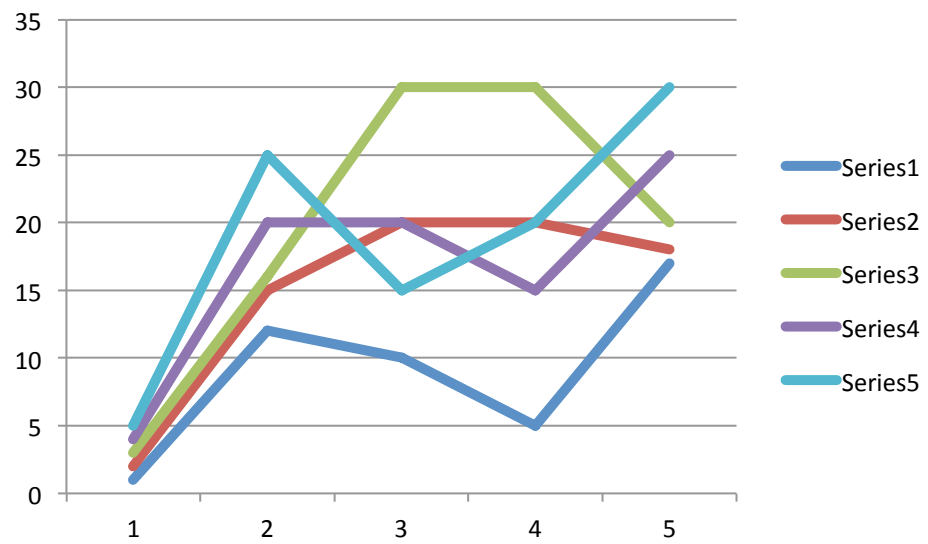


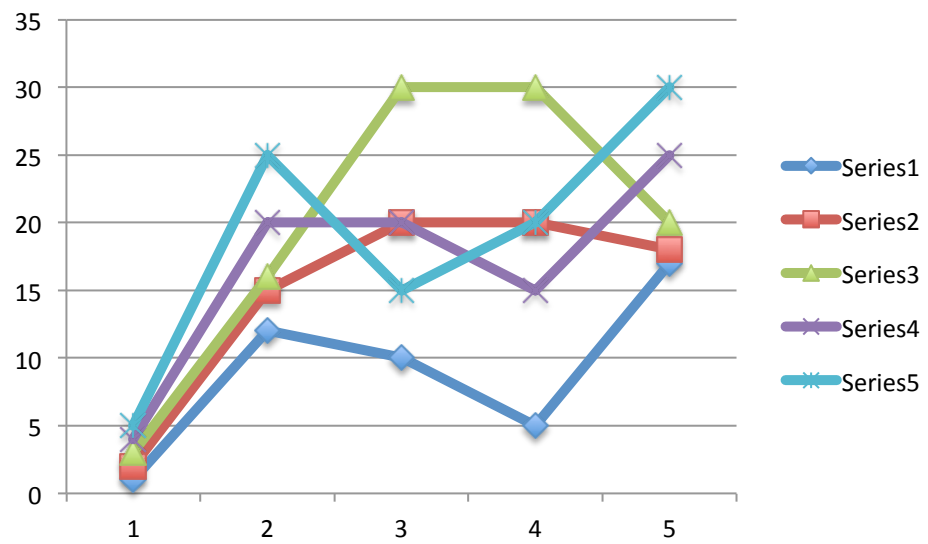






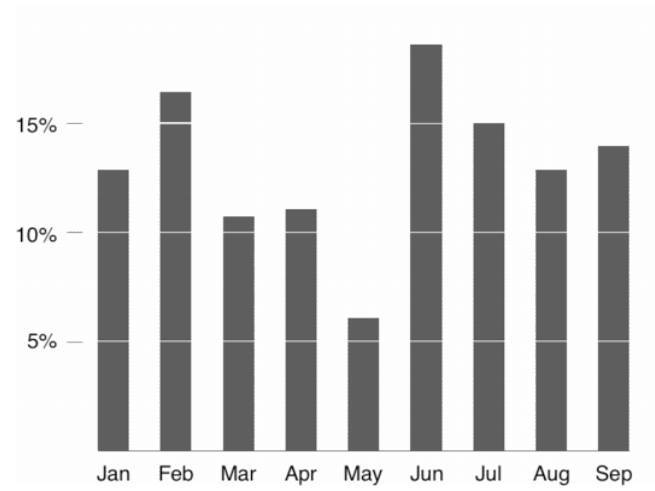
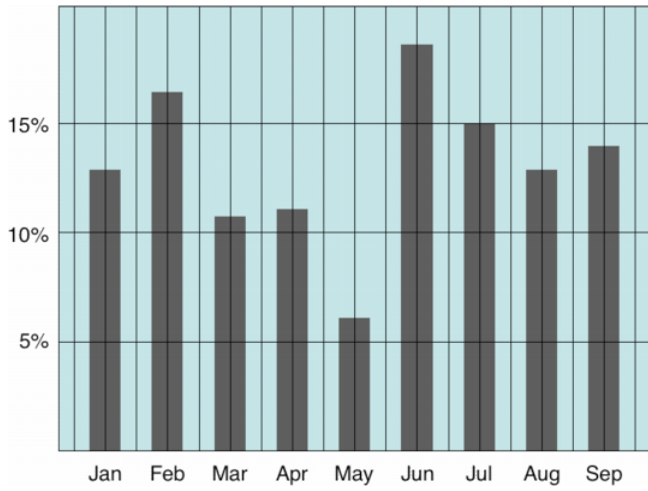






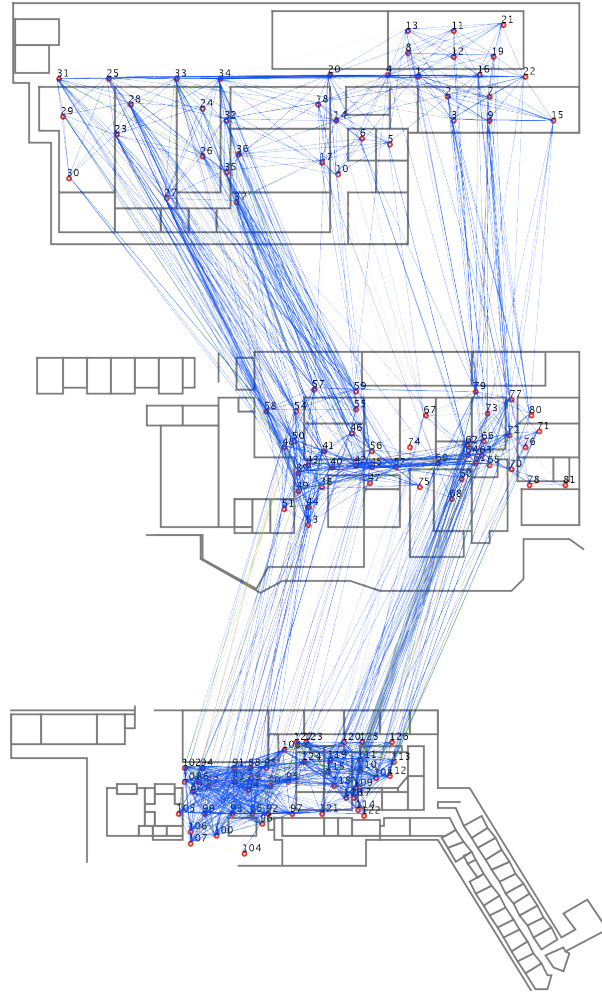
$$\begin{aligned} \text{Data-ink ratio} &= \frac{\text{Data-ink}}{\text{Total ink used to print the graphic}} \\ &= \text{proportion of a graphic's ink devoted to the} \\ &\quad \text{non-redundant display of data-information} \\ &= 1.0 - \text{proportion of a graphic that can be erased} \end{aligned}$$

Tufte



Data ink ratio?

“Make every pixel count”



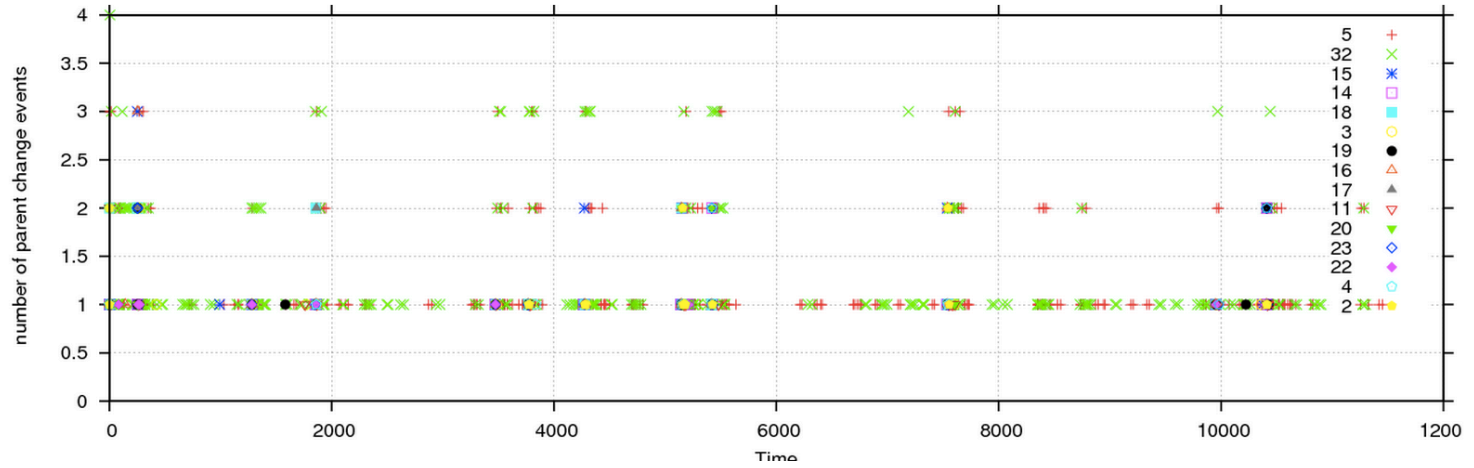
Animation

Watch Hans Rosling video on youtube

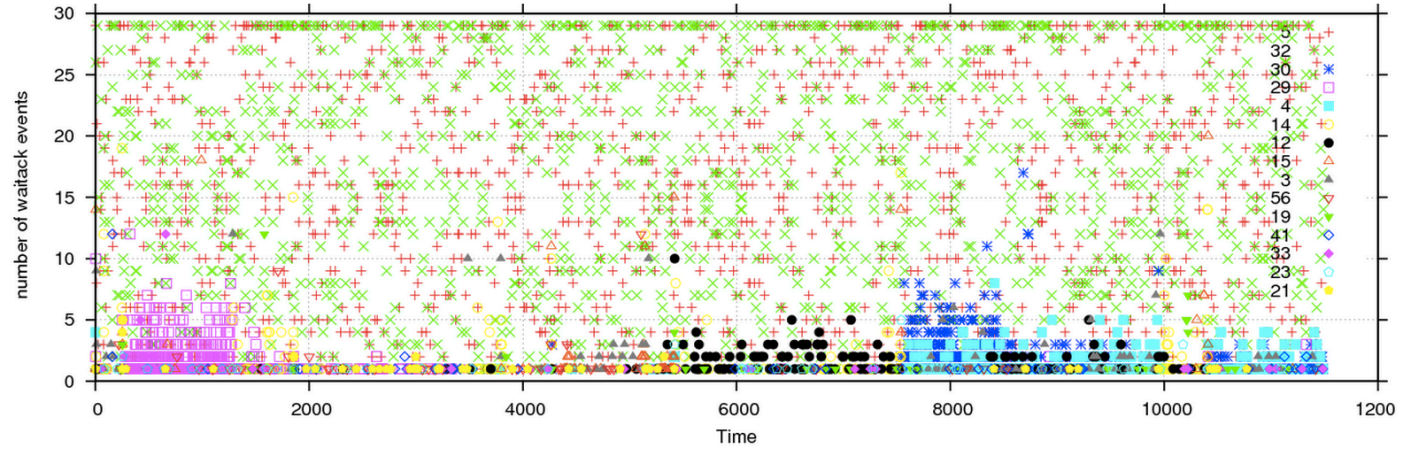
Aggregate vs instantaneous data

CTP “reliability” example

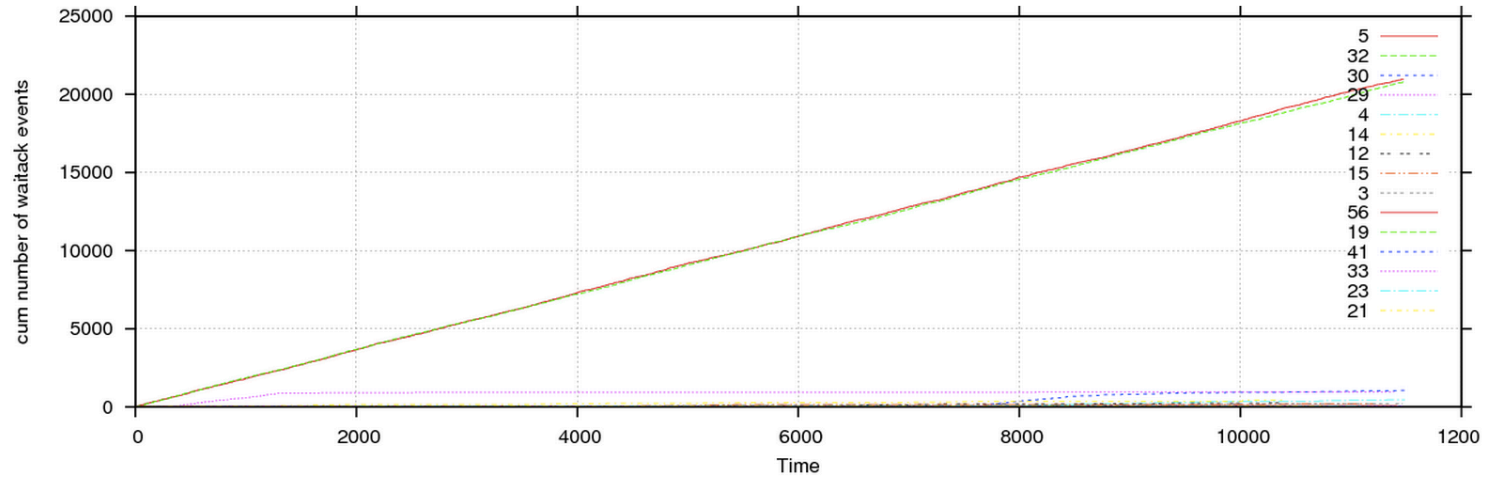
Parent changes



Wait ack



Wait ack



HW7

Identify 5 graphs that can be improved.
Explain how to improve them.

Identify 5 graphs that worked really well.
Explain why.