Institut for Matematik og Datalogi
Syddansk Universitet

May 14, 2009
JFB

On-Line Algorithms – F09 – Lecture 7

Instruktorater

Hjælp dine medstuderende, dygtiggør dig selv og få penge for det. Søg I dag!
Der er ofte gode muligheder for at få et instruktorat, selvom man ikke er langt henne i studiet. Se nærmere information på

`http://www.jobs.sdu.dk/vis_stilling.php?id=5147&lang=da`

Hvis du allerede er ansat som instruktor i efteråret 2009, leverer du ansøgning om tildeling af timer ind på IMADAs sekretariat (se opslaget vedr. bilag mm.)
Hvis du har spørgsmål, så henvend dig gerne på IMADA.

ANSØGNINGSFRIST: **27. maj 2009 kl. 12:00**.

Lecture, May 13

We finished chapter 6 and then began looking at the paper, "The relative worst order ratio applied to paging", by J. Boyar, L.M. Favrholdt, and K.S. Larsen, in *Journal of Computer and System Sciences*, volume 73, pages 817–843, 2007. You get this through the electronic journals SDU's library has. In section 2, we covered variants of definitions 1 and 2 and the result that LRU is better than FWF according to the relative worst order ratio.

Lecture, May 18

We will cover se cover sections 3 and 6, the definitions for relatedness and weakly comparable in section 2 of "The relative worst order ratio applied to paging", and Theorem 7 of section 5.

Lecture, May 22

We will cover chapters 7 and 8 in the textbook quickly.

Problems for May 25

1. In the definition of RLRU, in the case where p is requested, but there is not fault, the algorithm only marks the next page if it is different from the previous. What happens to the results on RLRU if this check is removed and the page is always marked. What if it is never marked?

2. In the definition of RLRU, what if you change the condition starting a new phase to be "the $k+2$nd different page since the start of the last phase was found" or "this was the $k+2$nd fault since the start of the last phase"? What happens to the results on RLRU?

3. Compare MTF and TRANS for the list processing problem, using the relative worst order ratio.

4. How would you define a "strict relative worst order ratio"?

5. Work out an example showing how to change a worst case ordering for LRU to a worst case ordering for PERM_π.