

On-Line Algorithms – F17 – Lecture 3

Lecture, February 3

We continued with chapter 1 in the textbook, covering up through Lemma 1.3.

Lecture, February 8

We will finish chapter 1 and begin on chapter 2 in the textbook. (I may finish this chapter in a discussion section.)

Lecture, February 14

Kim Skak Larsen will lecture on chapter 3 and begin on chapter 4.

Problems for February 15

1. Problems that we didn't finish on February 10.
2. Exercise 2.1 in the textbook.
3. Exercise 2.3 in the textbook (but only for the static case).
4. Show that there is a request sequence on which BIT's performance ratio is no better than $\frac{7}{4}$ in the partial cost model. (It is sufficient to look at lists of length 2.)
5. Do Exercise 2.4. Note that the lower bound will depend on p , rather than being $2 - \epsilon$.
6. How do you define BIT and COMB in the dynamic model?
7. Do Exercise 2.5 in the textbook.