Institut for Matematik og Datalogi Syddansk Universitet

DM508 – Algorithms and Complexity – 2009 Lecture 6

Lecture, February 23

We continued with NP-Completeness, covering the proofs that VERTEX COVER, INDE-PENDENT SET, HAMILTONIAN CIRCUIT, and SUBSET SUM are NP-Complete. The actual reductions given for HAMILTONIAN CIRCUIT and SUBSET SUM were from the textbook by Papadimitriou and Steiglitz (some of which is in your course notes) and from the first edition of the course's textbook (which is now on reserve in IMADA's library), respectively.

Lecture, March 2

We will quickly finish NP-Completeness and begin on amortized analysis from chapter 17 of the textbook and Fibonacci heaps from chapter 20.

Lecture, March 4 at 12:15

We will finish with Fibonacci heaps and begin on string matching from chapter 32.

Problems to be discussed on March 5

Do the following problems in the textbook: 17.1-2, 17.1-3, 17.2-3, 17.3-2, 17-3-7, 17-3, 3.2-7, 20.2-1, 20.2-3, 20.2-5.