




Course

-  CS-E3190
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This course has already ended.

The latest instance of the course can be found at: [Principles of Algorithmic Techniques: 2023 Autumn](#)

« Lecture and Exercise Set 4 - Local Search

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# Materials

- **Lecture slides:**
  - [subsetsum.pdf](#)
  - [MST.pdf](#)
- **Lecture videos:**
  - [Local Search](#)
  - [Minimum Spanning Tree](#)
- **Tutorial Exercise:**
  - [Tutorial04.pdf](#)
- **Graded Exercise:**
  - [Graded04.pdf](#)
  - Latex template: [04-tex-template.zip](#)
- **Lecture script:**
  - Chapter 4 - [script 1-5.pdf](#)
- **Jeff Erickson book:**
  - Section 2.3, 2.4, Subset Sum
  - Section 7.5, Kruskal’s algorithm
  - The hardness of SubsetSum is quite subtle and there is an “efficient” DP algorithm. See Section 3.8 for details.
- **Wikipedia:**
  - [Local search for optimization](#)
- **Union-Find:**
  - Recall Aalto CS-1140 - Data Structures and Algorithms
  - [Wikipedia](#)

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