Course Organization

L3 Algorithmics and Programming

Pierre Senellart

27 September 2018

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- 2-hour lecture every week (Thursday), from 8:30 to 10:30, in room U/V)

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- Course material, homework uploads, announcements, etc., all via Moodle: `https://moodle.di.ens.fr/course/view.php?id=2` Log in with your clipper account (if you do not have one, let me know)

Teachers

Pierre Senellart

Professeur ENS, Data Management team

Half of the lectures, in charge

Tatiana Starikovskaya

Maître de conférence ENS, Algorithmics team

Half of the lectures, Thursday's exercise session, homework

Pierre Aboulker

Maître de conférence ENS, Algorithmics team

Friday's exercise session, homework

Bibliographie

- Most of the course relies on this textbook:

Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, and Clifford Stein.
Introduction to Algorithms.
MIT Press, 3rd edition, 2009.

Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, and Clifford Stein.
Algorithmique.
Dunod, 3rd edition, 2010.

- Corresponding chapters (3rd edition) are marked in the course summary (here and on Moodle)
- Some lectures go beyond this textbook, noted with a $\star$

Curriculum (1/2)

27/09 Introduction to algorithms and data structures (chap. 1-3, 10, 12, 17), Pierre

04/10 Divide and conquer (chap. 4, 30), Pierre

11/10 Dynamic programming and greedy algorithms (chap. 15, 16), Pierre

25/10 Sorting algorithms (chap. 6-8), Tatiana

08/11 Data structures for sets and hashing (chap. 11, 13), Pierre

15/11 Disjoint-set data structures (chap. 21), Pierre

Programme du cours (2/2) – Tatiana

22/11 Text algorithms (chap. 32), Tatiana

29/11 Minimum spanning tree (chap. 23), Pierre

06/12 Depth-first search (chap. 22), Tatiana

13/12 Shortest paths (chap. 24), Tatiana

20/12 Flow networks (chap. 26), Tatiana

10/01 Flow networks II (chap. 26), Tatiana

24/01 Exam

Language

- If you agree, lectures will be in English
- Thursday's exercise session is in English
- Friday's exercise session is in French
- All teachers speak both English and French, you can use either in homework, exam, Moodle interactions, etc., indifferently
- Most course materials are in English

Questions?