

I618 Advanced Computer Science II (Part II)

2007, Term 2-2(12/3 ~ 2/8)

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Lessons:

- I will use the white board and PowerPoint with some documents.
- You have to submit one report about graph classes. The details will be announced later.

Web page: The materials (PDF file of PowerPoint, and so on) will be put on the following page:
<http://www.jaist.ac.jp/~uehara/course/2007/i618> .

Schedule:

12/21(Fri): Graph class 1: Interval graphs and related topics.

1/ 7(Mon): Graph class 2: Chordal graphs and related topics¹.

1/ 9(Wed): Recognition of graph classes.

1/11(Fri): Graph isomorphism — hardness and polynomial time algorithms.

1/16(Wed): Other problems and related classes.

References: I suppose you know about basic notations/notions about graphs. Refer the books [1, 2] for the terms of graphs.

References

- [1] R. Diestel. *Graph Theory*. Springer, 1996.
- [2] M.C. Golumbic. *Algorithmic Graph Theory and Perfect Graphs*. Annals of Discrete Mathematics 57. Elsevier, 2nd edition, 2004.

¹Office Hour: 15:10-16:40