Lecture 7: Materials, June 6th

Inapproximability

1. Grade for this class

Please refer to the histogram of students' score at the back side of this page. I have a plan to have more students in Zone A and B. Hence,

- If you are in Zone A, your grade will be A if you can keep the same performance at the final exam.
- If you are in Zone B, your grade could be A or B if you can keep the same performance at the final exam.
- If you are not in Zone A or B after the final examination, you will be asked to submit a report. Based on your performance of the report, your grade could be B or C.

Your participation in the final examination is required to obtain the grade. However, the participation in the quiz is not required.

2. Schedule from next week

June 13 Quiz for students who did not take it

- You are not eligible to join the quiz if you joined on May 30th

- No class on the day

June 20 Class 8

June 27 Class 9

July 4 Class 10

July 11 Final Examination

July 18 Class 11

3. Sparse Approximation of Kernel Methods

Contents we have discussed in this class can be found in the following papers.

Cortés and Scott, "Sparse Approximation of a Kernel Mean", IEEE Transactions on Signal Processing, Vol. 65, No. 5, pages 1310-1323, 2017.

4. Inapproximability

Our explanation is based on <u>Chapter 16.1</u> and <u>Chapter 2.2</u> of the main textbook: Williamson and Shmoys, "*The Design of Approximation Algorithms*", Cambridge University Press, 2010. http://www.designofapproxalgs.com/book.pdf

5. Applications Allocation in Volunteer Cloud

The content we discuss today can be found in the following paper:

Jiang, Wan, Cérin, Gianessi, and Ngoko, "Towards Energy Efficient Allocation for Applications in Volunteer Cloud", Proceedings of the 28th IEEE International

Parallel & Distributed Processing Symposium (IPDPS' 14) - Workshops, pages 1516 - 1525, 2014.

