Design and Analysis of Information Systems 2019 Report Problems

Select two of the below four problems, and prepare the report in Word or PDF file to send to <u>tokuyama@dais.is.tohoku.ac.jp</u> By January 25, 2019. The length of report is expected to be 2 to 4 A4 sheets, but there is no limit. You should use either English or Japanese for the language.

- 1. Describe one of the algorithms given in the lecture (Segment intersection, Convex polygon intersection, Polygon area computation, Art Gallery problem, Polygon triangulation, Max Min-angle triangulation)
- 2. Explain your own research topic (how interesting it is, how important it is etc.) so that a high school student with interest in science will be attracted.
- 3. We are in the era of AI and IoT. However, there are some worry about the future of human with (too advanced) AI technology. For example, the famous Steven Hawking gave strongly negative comments about AI. For example, watch

https://www.youtube.com/watch?v=fFLVyWBDTfo

Examine his idea, and, as a student of information sciences, find possible counter argument to it, and discuss how to make bright future with advanced AI technology.

4. Give your 10 year outlook of IT technology. How the world will be changes in 2028 by advancement of IT? Or, what kind of new IT technology will be possibly developed?