KTP563 – 컴퓨팅 시스템 개론
Spring 2024

- **Outline**
  This course covers various computing systems issues, including computer architecture, operating systems, and system for artificial intelligence (AI). Initially, we will go through the basics of computer systems in the hardware perspective, focusing on the computer architecture, and then, we will switch to the software side by learning about the core concepts and designs of modern operating systems. Lastly, we will briefly skim through recent advances in both hardware and software, which are specifically designed and developed for AI.

- **Instructors**
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- **Class Hours**
  - 10:00am – 12:00pm, 13:00 – 14:00pm (Friday)

- **References**
  1. Computer Architecture A Quantitative Approach by Patterson and Hennessy
  2. Operating System Concepts, Silberschatz, Galvin, & Gange

- **Tentative Schedule**

Week	Topic
1	Superscalar Processors
2	Memory System
3	Data-level Parallelism
4	Flash Memory
5	Power and Security Issues
6	Operating Systems: Introduction
7	Processes
8	Threads and Synchronization
9	Memory Systems
10	File Systems
11	Parallel Processing for AI
12	Hardware Accelerators for AI I
13	Hardware Accelerators for AI II
14	Software Systems for AI I
15	Software Systems for AI II