



Active Learning 2

- This is a **team project**.
 - Same members as term project
- Submit a PPT on one topic in the next page.
 - Due: 24:00 Nov. 9 (Wed class) or 10 (Thur class)
- * Think of presenting the material to your classmates in this course.
 - Each team will make a presentation on Nov. 10 (Wed) or 11 (Thur).



Project Topics

- Parallel Machine Learning

- Parallel ML makes full use of many cores in contemporary CPUs and GPUs to handle larger datasets more efficiently than single-thread ones.
- Especially, GPU algorithms are highly required for large-scale deep learning algorithms.

- Federated Learning

- Without collecting sensitive data in a central server, a sub-model is built at each site using local datasets.
- Sub-models are brought together to build a unified model, which is updated again at each site using local datasets. This is repeated to improve accuracy.



PPT Preparation

- Pick one topic and explain the following:
 - Brief description (concepts)
 - Backgrounds and reason to exist (differences from others)
 - Technical challenges (difficulties)
 - Related algorithms and solutions
 - Applications and systems