Date: 1/17/2022 Time: 6:00 PM PST

# 1. Meeting goals:

- Kick-off
- Clarification for this capstone
- Potential questions

#### 2. Questions:

#### **Project-related questions:**

- Starting point => general introduction
  - Prof Yu gave us an overview of this project.
- Narrow down the title?
  - o Per prof Yu, there is no need to narrow down the title
- Data science or computer science project? How to make it more data science?
  - This is a data science project. It's hard to differentiate data science from computer science.
- One of three approaches? Or three steps in one approach?
  - Typo from a template, it should be all of these three steps.
- How big will the dataset be that can better fit the needs?
  - o It depends.
- Can we use the dataset for PEM and Air Quality, which are shared in personal google drive? Need consent?
  - Yes, we can. No consent is needed as these datasets are from prof Yu's students.
- Any papers or materials prof Yu would like to share to help us better understand the project?
  - Open Graph Benchmark: <a href="https://arxiv.org/pdf/2005.00687.pdf">https://arxiv.org/pdf/2005.00687.pdf</a>
- Supervised/unsupervised learning?
  - Does data have to be labeled or do we need to create our own?
- For the leaderboard, is it similar to the leaderboard on the open graph benchmark?
  - Yes
- Clarification of "Dataset class" under Project Tasks
- Are we mainly creating infrastructure, or would it be possible for us to experiment with different learning models?
  - Create infrastructure and experiment with different deep learning models.

### **Arrangement-related questions:**

- Recurring meeting date and time?
  - Done. On Monday, can be flexible.

### 3. Background Materials

## Capstone:

https://docs.google.com/document/d/1CinAezZhex\_NNRVi3EgDTkOjHzfUTHKRpZ1F\_o AkpRI/edit?usp=sharing

Deep learning lectures: <a href="https://sites.google.com/view/cse151b">https://sites.google.com/view/cse151b</a>

Dive deep into Deep Learning: https://d2l.ai/

- Section 1-4, 14 and 15
- Use Pytorch

# Writing template:

https://www.overleaf.com/latex/templates/neurips-2021/bfjnthbqvhgs

Github: <a href="https://github.com/Rose-STL-Lab/torchTS">https://github.com/Rose-STL-Lab/torchTS</a>

Pytorch: <a href="https://pytorch.org/tutorials/beginner/data-loading-tutorial.html">https://pytorch.org/tutorials/beginner/data-loading-tutorial.html</a>

Other: <a href="https://overleaf.com/">https://overleaf.com/</a>

http://yann.lecun.com/exdb/mnist/

### 4. Action:

- Create a timeline for the task and assignment
- Finish the report 1
- Learn all materials and prepare for the next meeting. Prof Yu will ask us questions related to deep learning.