GitHub, LaTeX, and Colab

Tutorial 0: Prerequisites
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1. Git and GitHub

- **Requirements**

  - You need to use Git to manage your codes of the final project. All your source codes are **required** to be submitted in GitHub.

- **Learning materials**

  - Official tutorials of Git: https://git-scm.com/doc

  - Official tutorials of GitHub: https://docs.github.com/en/get-started/quickstart/hello-world

  - Using Pull requests to collaborate: https://docs.github.com/en/pull-requests/collaborating-with-pull-requests/proposing-changes-to-your-work-with-pull-requests

- **Further reading**

  - Using Git source control in VS Code: https://code.visualstudio.com/docs/sourcecontrol/overview

2. LaTeX and Overleaf

- **Requirements**

  - Your final project report is **required** to be written by LaTeX (a template will be provided).

  - Other reports (such as assignments) are also encouraged to be written by LaTeX.

  - We recommend to use Overleaf to write LaTeX online.

- **Learning materials**

  - Overleaf - Learn LaTeX in 30 minutes: https://www.overleaf.com/learn/latex/ Learn_LaTeX_in_30_minutes

3. Colab

- **Colab is recommended but not mandatory.**

- **If you have the following needs when coding, just try it:**

  - Need free GPU resources.

  - Need to visualize and share your code elegantly.

  - Need online interactive coding like Jupyter Notebook.

- **Learning materials**

  - Official tutorials: https://colab.research.google.com/

  - Tutorial by Yen Meng, NTU: https://speech.ee.ntu.edu.tw/~hylee/ml/ml2022-course-data/Colab%20Tutorial%202022.pdf

In *Tutorial 1: PyTorch (Jan 11)*, I will provide you a colab notebook example to show **how to use GPU to train a PyTorch model**.

THANKS
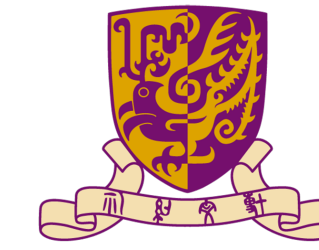
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Research interest: **"AI + Music"**, especially on:
✦ **Singing Voice Synthesis**
✦ **Algorithmic Composition**

Hiring: Our team is broadly interested in speech and music-related research. We have open positions for RA, PhD students, and visiting students.