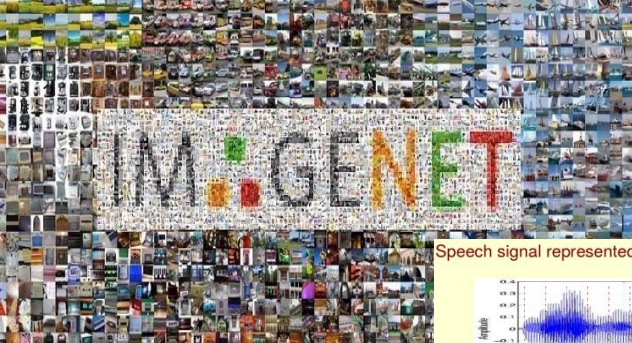




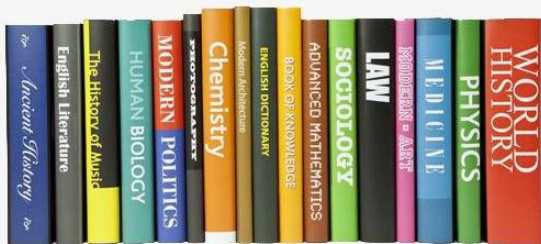
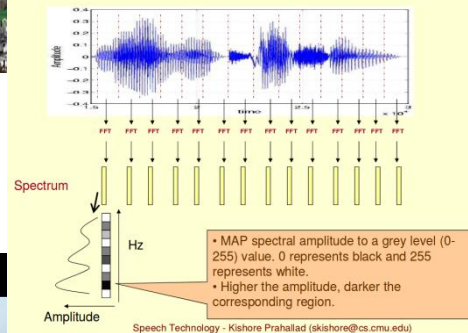
# Web Info Processing

- with Deep Learning Models

# Web information



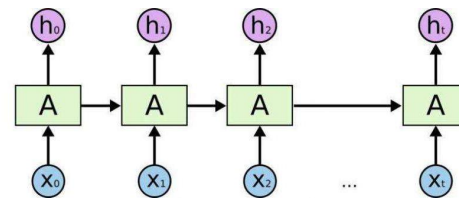
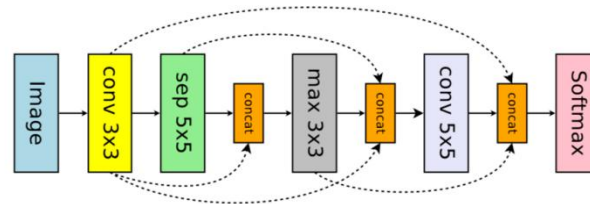
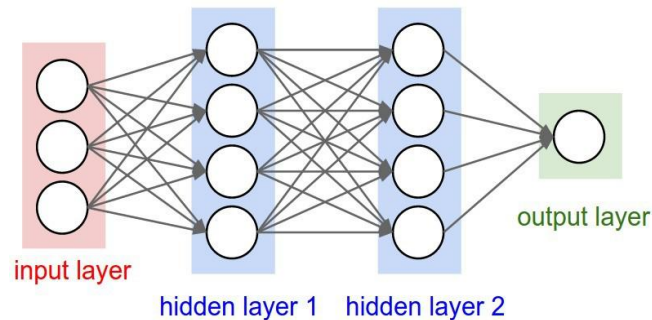
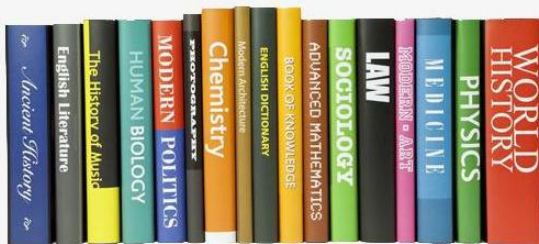
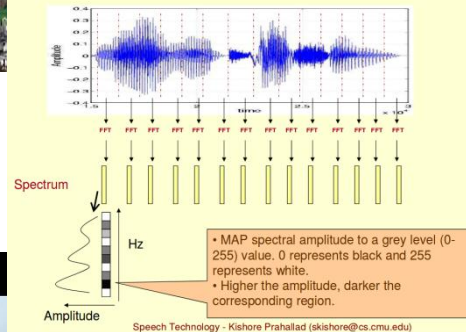
Speech signal represented as a sequence of spectral vectors



# A Unified Approach

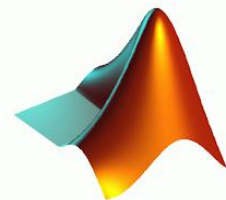


Speech signal represented as a sequence of spectral vectors



# Deep Learning Models

- Fundamental DL Models
  - Convolutional Neural Network
  - Recurrent Neural Network
  - Generative Adverial Network
- Advanced DL Models
  - CapsuleNet
  - Transformers
  - WGAN

The PyTorch logo, consisting of the word "PYTORCH" in a bold, sans-serif font, with a stylized orange flame icon replacing the letter "O".

**MATLAB**



# Class Project

- Every class member should submit ONE class project
- You can use **Arxiv6k** dataset, or prepare your own dataset, and train your own model
- The project should be focused on image, sound, video, textual, or multimodal contents.



# Grading Policy

- 50% points for the final project report (on Github)
- 50% points for the final class presentation



# Github Repos

- Class slides repo
  - <https://github.com/info-ruc/web21>
- Project submission repo
  - <https://github.com/info-ruc/web21projects>