



UNIVERSITY OF INFORMATION TECHNOLOGY
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DS313
SPEECH INFORMATION PROCESSING

Lecturer: MSc. Luan Thanh Nguyen
Department of Data Science
Faculty of Information Science and Engineering

About me!

- ❖ Name: Luan Thanh Nguyen.
- ❖ Email: luannt@uit.edu.vn
- ❖ Department: Data Science, ISE, UIT.
- ❖ Topics:
 - ❖ Subjects: Speech Information Processing, UI Design, Java Technology, Social Media Mining, Natural Language Processing, Programming Languages (Java, Python, ..), ...
 - ❖ Research Interests: Speech Processing and Natural Language Processing.

Why we should learn speech processing?

- ❖ Things make humans being unique:
- ❖ How do humans produce voice and speech?
- ❖ What is speech?
- ❖ What can we do with speech?
- ❖ ...

Objectives of Our Course

- ❖ **G1:** Understanding, analyzing, and processing information from human speech.
- ❖ **G2:** Understanding the process of speech processing: from research to application.
- ❖ **G3:** Understanding, analysis, methods, experiments, and evaluation of simple research through speech processing advances.

Evaluation

❖ Progress (20%):

- Type: Attendance (40), Homework (60) and Bonus (++)
- Assessment: Attendance (max -2), Homework (3/N)

❖ Lab (30%):

- Type: Attendance (40), Report (60).
- Assessment: Lab assignment and Final project progress.

❖ Final Project (50%):

- Type: Project.
- Assessment:
 - Writing report: 20
 - Presentation: 60
 - Other (Q&A): 20

This course's contents

- ❖ **Chapter 1: Speech Production**
- ❖ **Chapter 2: Speech Perception**
- ❖ **Chapter 3: Signal Processing**
- ❖ **Chapter 4: Speech Synthesis**
- ❖ **Chapter 5: Speech Recognition**
- ❖ **Chapter 6: Speech Translation**
- ❖ **Seminar 1 & 2: Final Project Presentation**

Final Project

- ❖ **Group:** 5 students
- ❖ **Beginning:** 3rd week
- ❖ **Requirements :**
 - Students must have weekly progress reports
 - Implementing a project.

Requirements

- ❖ **Slides:** in English
- ❖ **Lecturer:** teaching in Vietnamese
- ❖ **Students:** should take note in learning and teaching process

Contact me!

- ❖ **If you have any problem in your learning process and in your project, please feel free to contact me:**
 - **Email:** luannt@uit.edu.vn
 - **Note:** Please notify your meeting with me before at least 01 day.

Q&A

Thank you!