TEXT ANALYTICS

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Lecturers

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Graduate certificate in Practical Language Processing

Learning Outcomes: To be able to build language processing systems that support business decisions using information in the language data.

Module 1: Text Analytics (3 days)

- Skill 1: Pre-process textual data for analytics
- Skill 2: Categorize documents using classification, topic modelling or clustering
- Skill 3: Extraction information from text

Module 2: New Media and Sentiment Mining (3 days)

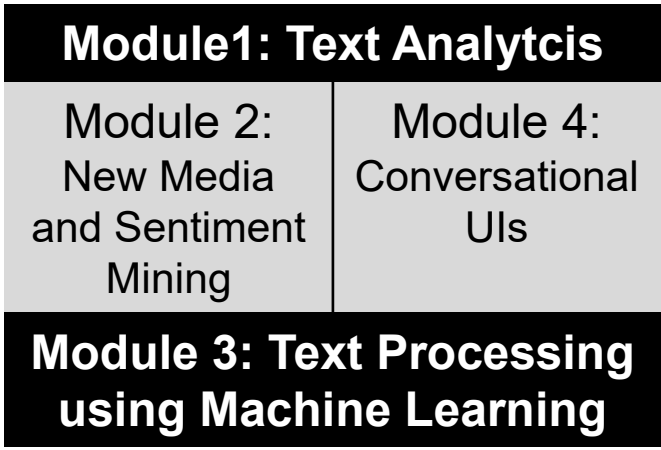
- Skill 1: Detect and classify sentiments
- Skill 2: Extract entities and aspects from opinions

Module 3: Text Processing using Machine Learning (4 days)

- Skill 1: Use deep neural networks for text mining tasks
- Skill 2: Apply appropriate learning techniques to obtain high quality models

Module 4: Conversational UIs (4 days)

- Skill 1: Design the architecture and conversation flow of conversational UIs for fielded applications
- Skill 2: Develop and evaluate conversational UIs



At the end of the Graduate Certificate, students can build various language processing systems such as:

- Document categorization systems
- Information extraction systems
- Sentiment analysis systems
- Chatbots

Course Agenda

Day	Module	Instructor
1	Course Introdution Introduction to Text Analytics Get the text data ready for analysis Essential linguistics & NLP tasks Tutorial & workshop	Zhenzhen
2	Document classification Topic modelling & document clustering Tutorials & workshops	Aobo
3	Extract information from text Linguistic resources to improve conceptualization Tutorials & workshops	Zhenzhen

Objectives of this course

At the end of this course, you can:

- Describe and follow the general text mining process to discover insights such as relations, patterns, trends, etc., from textual data
- Understand the concepts and be able to apply the techniques of major text mining tasks such as concept extraction, text categorization, clustering, topic modelling, etc.
- Understand the importance of domain-specific lexical and knowledge resources such as vocabularies, thesaurus, taxonomies, ontology, rules, etc., and be able to develop such resources to improve the mining results

In-Class Assessment for TA

- It’s compulsory.

- Competence-based Assessment
  - In-class quizzes
  - In-class workshop submissions