

Advanced Machine Translation

2 units (selection)

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Target) As a research and development field, machine translation (MT) is among the oldest among the various subdisciplines and applications of computer science to the study of natural language. This lecture aims to understand the basic MT technologies and to learn the latest MT theory and new approaches to develop MT system.

Outline) This lecture teaches the theory of machine translation (MT) and the technologies of MT systems. Main items in the lecture are syntax analysis, semantic analysis, knowledge processing, world knowledge model, natural-language-processing function, super-function, multilingual processing, etc.

Style) Lecture

Keyword) *machine translation, syntax analysis, semantic analysis, super function*

Fundamental Lecture) “自然言語処理”(1.0)

Relational Lecture) “Natural Language Understanding”(0.5)

Goal)

1. To understand the basic theory of machine translation (MT).
2. To Master the technique of developing a MT system.
3. To grasp the newest trend of machine translation research.

Schedule)

1. Introduction
2. Machine translation system
3. Morphological analysis I
4. Morphological analysis II
5. Syntax analysis I
6. Syntax analysis II
7. Semantic analysis I
8. Semantic analysis II
9. Semantic analysis III
10. Context analysis
11. Dictionary
12. Super-Function based MT I
13. Super-Function based MT II
14. Super-Function based MT III

15. Ontology and machine translation

16. Examination

Evaluation Criteria) Attendance (30%), report (30%), examination (40%)

Textbook) no special book

Contents) <http://cms.db.tokushima-u.ac.jp/cgi-bin/toURL?EID=216608>

Student) Able to be taken by only specified class(es)

Contact)

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