R2-723

Okumura-Takamura Lab

- Natural Language Processing
- Computational Linguistics

Research Theme

We are working on tasks of Natural Language Processing (NLP) with computational approaches and developing NLP related applications.

Natural Language Processing (NLP) with statistical or machine learning approaches

We have developed methods for extracting, analyzing and processing natural languages by using statistical and machine learning (including deep learning) approaches for a large amount of text data such as webpages and newspapers.

Automatic summarization

- Summarize a single text while keeping the original context
- > Summarize multiple documents in a single short document

Machine translation

Translate an input text into a different language

Live commentary generation

Generate a live-commentary for a sports game

Automatic dialog generation

Generate a natural response to the input utterance

Language learner support

Correct grammatical errors in a text

Opinion and text mining

- > Analyze social movement and sentiment on web texts
- > Estimate the sentiments and emotions of the authors

Natural Language Parsing

> Syntactic, semantic and dialog analysis

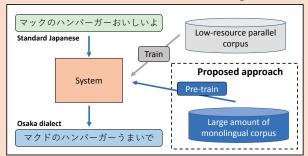
Activities

In our lab, you should participate in monthly progress report meetings and weekly reading group meetings. You can also join machine learning and algorithm lectures. Apart from researches, you can go on a trip with lab members once a year. Our lab has no daily core time.

Recent Researches

Dialect translation with generalized labels and pre-training approach

Create a system to convert standard words into dialects based on a small amount of training data



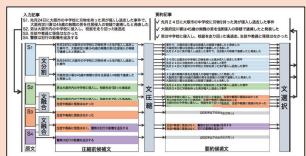
Automatic generation of inning reports from baseball batter results

Find important events from baseball batter results and generate inning reports based on the results by using pre-defined templates



News article summary under length constraints

Flexibly use sentence fusion, sentence segmentation, and sentence compression method to generate simple summaries of news articles



Support to understand the meaning of new katakana verbs

Help understand new katakana verbs in microblogs such as Twitter by displaying the origins and the paraphrases of the words

