

# Tamkang University

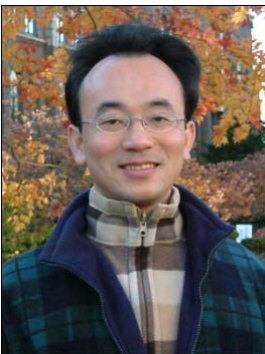
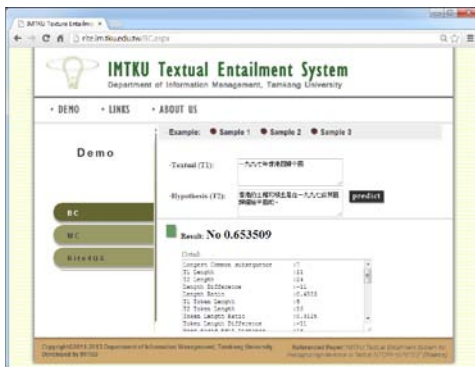
# 淡江大學



## IMTKU Textual Entailment System for Recognizing Inference in Text at NTCIR-10 RITE-2

# Demo

<http://rite.im.tku.edu.tw>



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NTCIR-10 Conference, June 18-21, 2013, Tokyo, Japan



# IMTKU Textual Entailment System

Department of Information Management, Tamkang University



- DEMO
- LINKS
- ABOUT US

## Demo

BC

MC

Rite4QA

-Example: ● Sample 1 ● Sample 2 ● Sample 3

-Textual (T1):

一九九七年香港回歸中國

-Hypothesis (T2):

香港的主權和領土是在一九九七由英國歸還給中國的。

predict

Result: **No 0.653509**



### Detail

Longest Common subsequence	:7
T1 Length	:11
T2 Length	:24
Length Difference	:-11
Length Ratio	:0.4583
T1 Token Length	:5
T2 Token Length	:16
Token Length Ratio	:0.3125
Token Length Difference	:-11
Word-Based Edit Distance	:18



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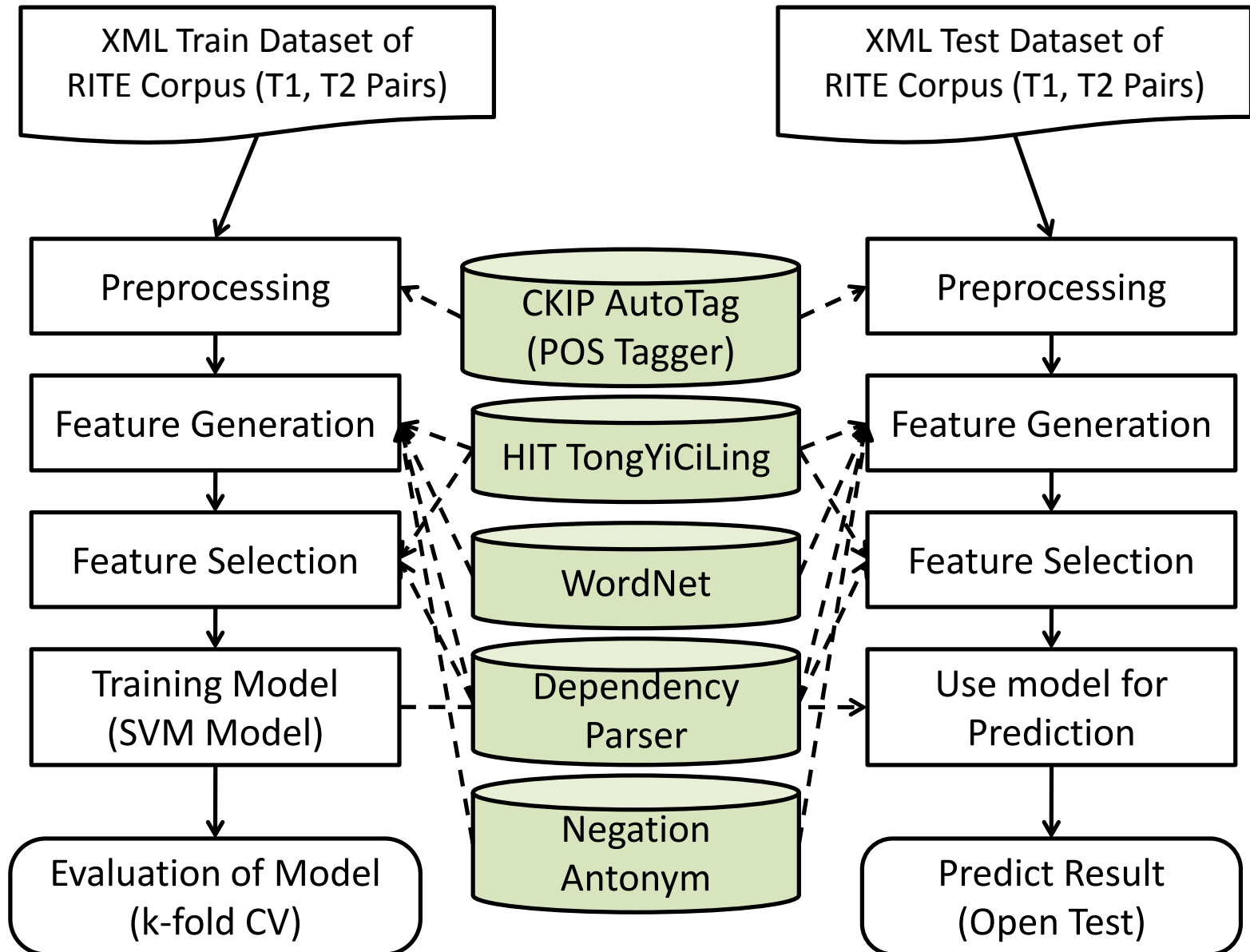
Result: **No 0.653509**



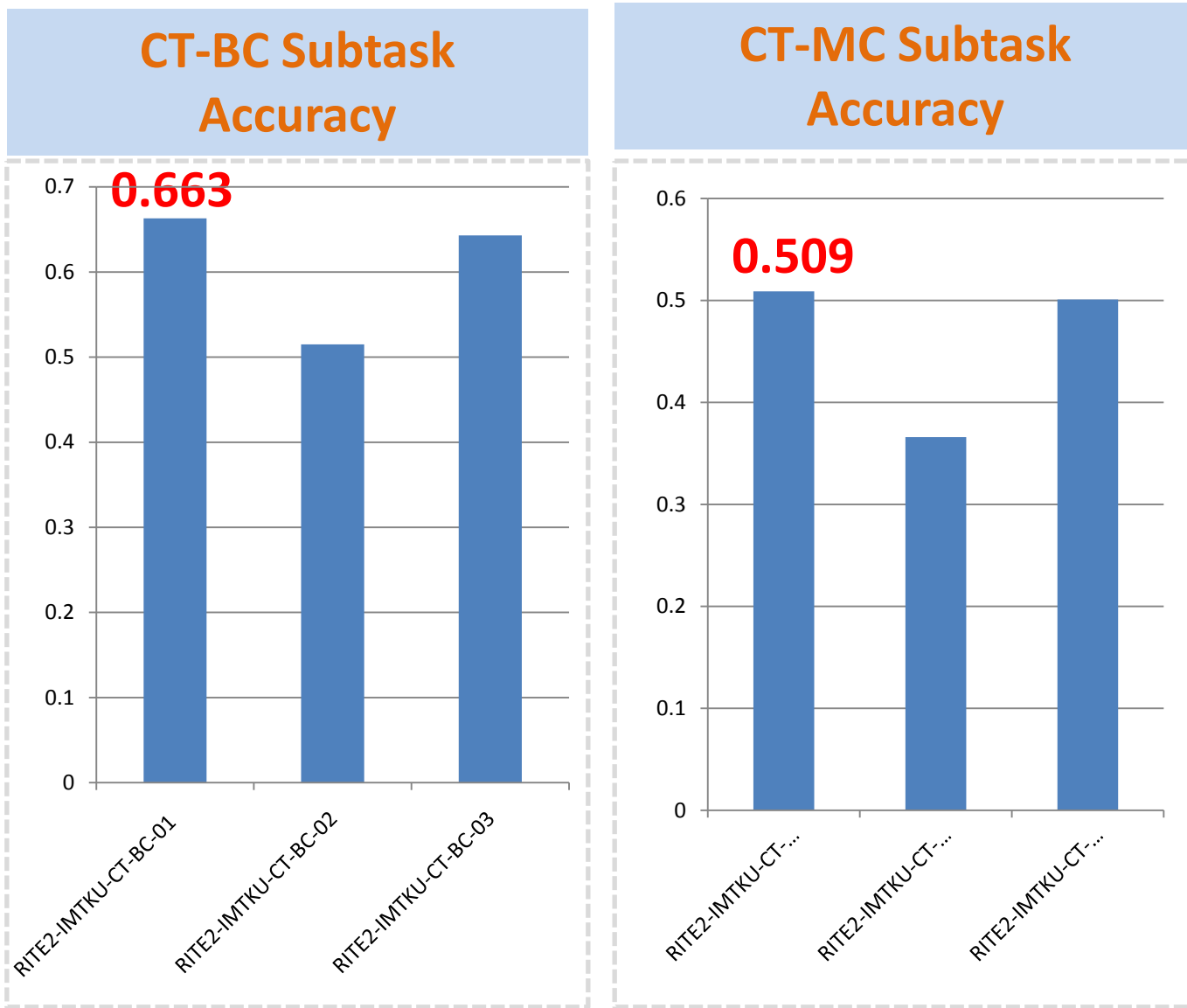
### Detail:

Word Similarity	:0.8747
Word Net Similarity	:18.55
Word Net Similarity Ratio	:23.08333333333333
Word Net Similarity Short	:30.33333333333333
Negation Number Difference	:0
Antonym Number Difference	:0
T1: 一九九七年香港回歸中國	
T2: 香港的主權和領土是在一九九七由英國歸還給中國的。	
T1 CKIP: ? (QUESTIONCATEGORY)	一九九七年 (N) 香港 (N)
回歸 (V+) 中國 (N)	

# IMTKU System Architecture for NTCIR-10 RITE-2

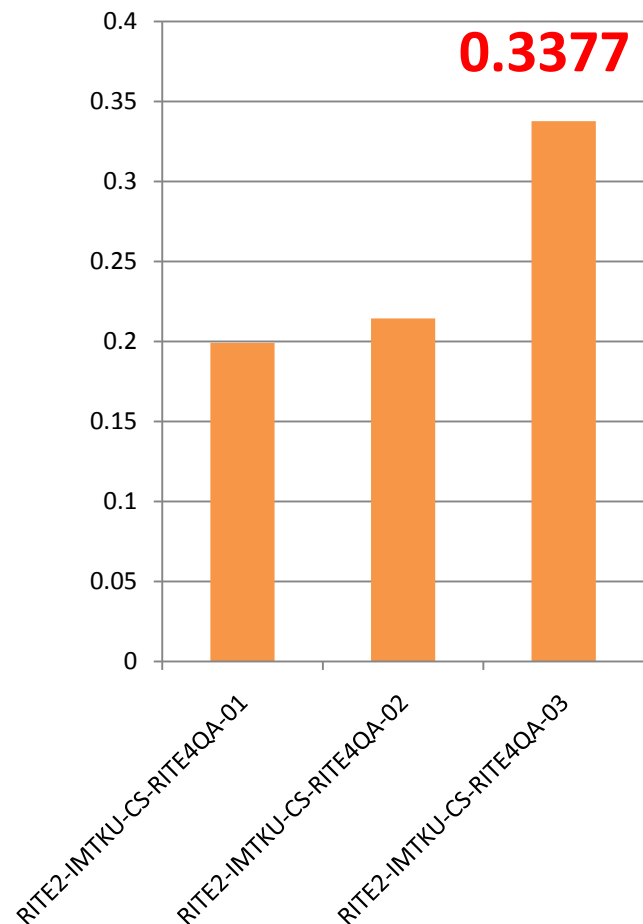


# IMTKU at NTCIR-10 RITE-2 Task Performance

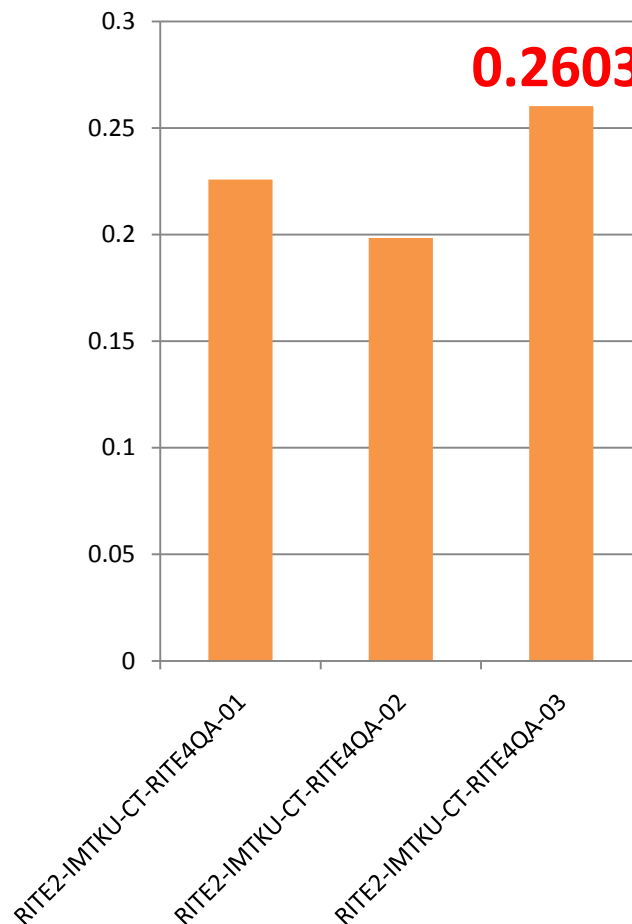


# IMTKU at NTCIR-10 RITE-2 Task Performance

CS-RITE4QA Subtask  
MRR



CT-RITE4QA Subtask  
MRR





# IMTKU Experiments for NTCIR-10 RITE-2 Datasets

Datasets	10 Fold CV Accuracy
RITE2_CT_dev_test_bc_g.txt (RITE2 BC Dev + Test Dataset: 1321 + 881 = <b>2202 pairs</b> )	68.85%
RITE1_CT_r1000_dev_test_bc_g.txt (Random select <b>1000 pairs</b> from RITE1 BC Dev+ Test Dataset)	<b>73.83%</b>
RITE1_CT_dev_test_bc_g.txt (RITE1 BC Dev +Test Dataset: 421 + 900 = <b>1321 pairs</b> )	72.29%
RITE1_CT_dev_bc_g.txt (gold standard) (RITE1 BC Development Dataset: <b>421 pairs</b> )	72.21%



# IMTKU Experiments for NTCIR-9 RITE Datasets

Datasets	10 Fold CV Accuracy
RITE1_CT_dev_bc_g.txt (gold standard) (BC Development Dataset: 421 pairs)	76.48%
RITE1_CT_test_bc_g.txt (BC Test Dataset: 900 pairs)	66.33%
RITE1_CT_dev_test_bc_g.txt (BC Dev+Test Dataset: 421+900 =1321 pairs)	67.67%





# 2013 IEEE International Workshop on Empirical Methods for Recognizing Inference in TExt

In conjunction with IEEE IRI 2013



San Francisco, USA  
August 14, 2013

### MENU

- [Call for papers](#)
- [Important dates](#)
- [Organizing committee](#)
- [Paper Submission](#)
- [Workshop Program](#)

### LINKS

- [IEEE IRI 2013](#)
- [IEEE EM-RITE 2013](#)
- [IEEE EM-RITE 2012](#)

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## Welcome to IEEE EM-RITE 2013

### IEEE International Workshop on Empirical Methods for Recognizing Inference in TExt (IEEE EM-RITE 2013)

In conjunction with [IEEE IRI 2013](#)

San Francisco, USA  
August 14, 2013



Textual Entailment and Paraphrase are inference tasks of natural language processing (NLP) for automatically detecting entailment, paraphrase, and contradiction in texts. The aim of this workshop is to provide a forum for original high-quality research contributions on empirical methods for recognizing inference in text as well as multidisciplinary research opportunities.

Topics of interest include but are not limited to practical areas that span a variety of aspects of empirical methods for recognizing inference in text including:

- Guidelines, standards, best practices and models for the construction and annotation of Textual Entailment datasets
- Evaluation of Knowledge Resources for Textual Entailment
- Recognizing Inference in Text
- Recognizing Textual Entailment

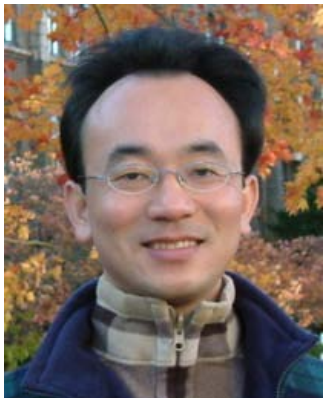
# Q & A



**Tamkang  
University**

## **IMTKU Textual Entailment System for Recognizing Inference in Text at NTCIR-10 RITE-2**

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