

A hybrid approach to vietnamese word segmentation using part of speech tags

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Abstract: Word segmentation is one of the most important tasks in NLP. This task, within Vietnamese language and its own features, faces some challenges, especially in words boundary determination. To tackle the task of Vietnamese word segmentation, in this paper, we propose the WS4VN system that uses a new approach based on Maximum matching algorithm combining with stochastic models using part-of-speech information. The approach can resolve word ambiguity and choose the best segmentation for each input sentence. Our system gives a promising result with an F-measure of 97%, higher than the results of existing publicly available Vietnamese word segmentation systems. © 2009 IEEE.

Index Keywords: Boundary determination; F-measure; Hybrid approach; Maximum matchings; New approaches; Part Of Speech; Part-of-speech tags; Word segmentation; Word segmentation systems; Stochastic models; Systems engineering; Knowledge engineering

Year: 2009

Source title: KSE 2009 - The 1st International Conference on Knowledge and Systems Engineering

Art. No.: 5361713

Page : 154-161

Link: [Scopus Link](#)

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Sponsors: College of Technology; Vietnam National University

Conference name: 1st International Conference on Knowledge and Systems Engineering, KSE 2009

Conference date: 13 October 2009 through 17 October 2009

Conference location: Hanoi

Conference code: 79895

ISBN: 9.78E+12

DOI: 10.1109/KSE.2009.44

Language of Original Document: English

Abbreviated Source Title: KSE 2009 - The 1st International Conference on Knowledge and Systems Engineering

Document Type: Conference Paper

Source: Scopus

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