MultiLing 2017

MultiLing 2017 Workshop on Summarization and Summary Evaluation Across Source Types and Genres

Proceedings of the Workshop

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Introduction

Welcome to the MultiLing 2017 Workshop on Summarization and Summary Evaluation Across Source Types and Genres. The Workshop is a continuation of the MultiLing community effort (cf. http://multiling.iit.demokritos.gr/) on advancing the state-of-the-art related to summarization and summary evaluation over different languages, genres and settings. We elaborate on the MultiLing focus in the next paragraphs.

Multilingual summarization across genres and sources: Summarization has been receiving increasing attention during the last years. This is mostly due to the increasing volume and redundancy of available online information but also due to the user created content. Recently, more and more interest arises for methods that will be able to function on a variety of languages and across different types of content and genres (news, social media, transcripts). This topic of research is mapped to different community tasks, covering different genres and source types: Multilingual single-document summarization ; news headline generation (new task in MultiLing 2017); user-supplied comments summarization (OnForumS task); conversation transcripts summarization (CCCS Task). The spectrum of the tasks covers a variety of real settings, identifying individual requirements and intricacies, similarly to previous MultiLing endeavors.

Multilingual summary evaluation: Summary evaluation has been an open question for several years, even though there exist methods that correlate well to human judgment, when called upon to compare systems. In the multilingual setting, it is not obvious that these methods will perform equally well to the English language setting. In fact, some preliminary results have shown that several problems may arise in the multilingual setting. The same challenges arise across different source types and genres. This section of the workshop aims to cover and discuss these research problems and corresponding solutions.

The workshop will build upon the results of a set of research community tasks, as outlined below:

Single document summarization Following the pilot task of 2015, the multi-lingual single-document summarization task will be to generate a single document summary for all the given Wikipedia feature articles from one of about 40 languages provided. The provided training data will be the Single-Document Summarization Task data from MultiLing 2015. A new set of data will be generated based on additional Wikipedia feature articles. The summaries will be evaluated via automatic methods and participants will be required to perform some limited summarization evaluations.

Headline Generation The objective of the Headline Generation (HG) task is to explore some of the challenges highlighted by current state of the art approaches on creating informative headlines to news articles: non-descriptive headlines, out-of-domain training data, and generating headlines from long documents which are not well represented by the head heuristic.

Summary Evaluation This task aims to examine how well automated systems can evaluate summaries from different languages. This task takes as input the summaries generated from automatic systems and humans in the Summarization Tasks of MultiLing 2015, but also in the Single document summarization tasks of 2015 and 2017 (when the latter is completed). The output should be a grading of the summaries. Ideally, we would want the automatic evaluation to maximally correlate to human judgement, thus the evaluation will be based on correlation measurement between estimated grades and human grades.

Online Forum Summarization Further to the successful pilot of OnForumS at MultiLing 2015, we are organizing the task again in 2017 with a brand new dataset. The OnForumS task investigates how the mass of comments found on news providers web sites (e.g., The Guardian) can be summarized. We posit that a crucial initial step towards that goal is to determine what comments link to, be that

either specific news snippets or comments by other users. Furthermore, a set of labels for a given link may be articulated to capture phenomena such as agreement and sentiment with respect to the comment target.

Call Centre Conversation Summarization The Call Centre Conversation Summarization (CCCS) task — run for the first time as a pilot task in 2015 — consists in automatically generating summaries of spoken conversations in the form of textual synopses that shall inform on the content of a conversation and might be used for browsing a large database of recordings. As in CCCS 2015, participants to the task shall generate abstractive summaries from conversation transcripts that inform a reader about the main events of the conversations, such as the objective of the participants and how they are met.

Please keep in mind that the above tasks will run also during and after the Workshop itself. An addendum to the proceedings, containing system reports and evaluations, will be provided in the MultiLing website (cf. http://multiling.iit.demokritos.gr/pages/view/1638/multiling-2017-proceedings-addendum) as reports become available and tasks progress.

We thank you for your contribution and participation in MultiLing 2017 and we hope that we will all enjoy this opportunity to further the summarization state-of-the-art through a productive and knowledge-rich meeting.

George Giannakopoulos

on Behalf of the MultiLing Organizers

Organizers:

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Josef Steinberger - University of West Bohemia (OnForumS task)
Marina Litvak - Sami Shamoon College of Engineering (Headline Generation Task)
Peter Rankel - Elder Research Inc. (Single Document Summarization Task)

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Mahmoud El-Haj - Lancaster University
George Giannakopoulos - NCSR Demokritos

Invited Speaker:

Enrique Alfonseca, Google

Table of Contents

MultiLing 2017 Overview
George Giannakopoulos, John Conroy, Jeff Kubina, Peter A. Rankel, Elena Lloret, Josef Steinberger, Marina Litvak and Benoit Favre 1

Decoupling Encoder and Decoder Networks for Abstractive Document Summarization
Ying Xu, Jey Han Lau, Timothy Baldwin and Trevor Cohn 7

Centroid-based Text Summarization through Compositionality of Word Embeddings
Gaetano Rossiello, Pierpaolo Basile and Giovanni Semeraro 12

Query-based summarization using MDL principle
Marina Litvak and Natalia Vanetik 22

Word Embedding and Topic Modeling Enhanced Multiple Features for Content Linking and Argument / Sentiment Labeling in Online Forums
Lei Li, Liyuan Mao and Moye Chen 32

Ultra-Concise Multi-genre Summarisation of Web2.0: towards Intelligent Content Generation
Elena Lloret, Ester Boldrini, Patricio Martinez-Barco and Manuel Palomar 37

Machine Learning Approach to Evaluate MultiLingual Summaries
Samira Ellouze, Maher Jaoua and Lamia Hadrich Belguith 47

Workshop Program

April 3rd, 2017

09:30–11:00 Opening and Invited talk

09:30–09:45 *MultiLing 2017 Welcome*
George Giannakopoulos

09:45–11:00 *Invited talk: Sentence Compression for Conversational Search*
Enrique Alfonseca, Google

11:00–11:30 Coffee break

11:30–13:00 MultiLing Tasks and Systems I

11:30–11:50 *MultiLing 2017 Overview*
George Giannakopoulos, John Conroy, Jeff Kubina, Peter A. Rankel, Elena Lloret, Josef Steinberger, Marina Litvak and Benoit Favre

11:50–12:10 *Decoupling Encoder and Decoder Networks for Abstractive Document Summarization*
Ying Xu, Jey Han Lau, Timothy Baldwin and Trevor Cohn

12:10–12:30 *Centroid-based Text Summarization through Compositionality of Word Embeddings*
Gaetano Rossiello, Pierpaolo Basile and Giovanni Semeraro

12:30–12:50 *Query-based summarization using MDL principle*
Marina Litvak and Natalia Vanetik

April 3rd, 2017 (continued)

14:30–16:00 MultiLing Tasks and Systems II

14:30–14:50 *Multilingual Single Document Summarization Overview*
John Conroy

14:50–15:10 *Word Embedding and Topic Modeling Enhanced Multiple Features for Content Linking and Argument / Sentiment Labeling in Online Forums*
Lei Li, Liyuan Mao and Moye Chen

15:10–15:30 *Ultra-Concise Multi-genre Summarisation of Web2.0: towards Intelligent Content Generation*
Elena Lloret, Ester Boldrini, Patricio Martinez-Barco and Manuel Palomar

15:30–15:50 *Machine Learning Approach to Evaluate MultiLingual Summaries*
Samira Ellouze, Maher Jaoua and Lamia Hadrich Belguith

16:00–16:30 Coffee break and poster setup

16:30–18:00 Poster session and Closing

16:30–17:30 ***Poster session***

17:30–18:00 ***Closing remarks and planning***