LPKM

2018

2nd International Conference on **L**anguage **P**rocessing and **K**nowledge **M**anagement

October 17th-18th, 2018

FSEG-Sfax, University of Sfax

http://lpkm2018.pythonanywhere.com/

Preface

The second edition of the Language Processing and Knowledge Management international conference is organized by the ANLP Research Group of MIRACL Laboratory (https://sites.google.com/site/anlprg/) and the Faculty of Economics and Management of Sfax (University of Sfax, Tunisia). This conference took place this year at the FSEG-Sfax (http://www.fsegs.rnu.tn/fra/home) from 17th to 18th October, 2018.

LPKM'2018 provided a venue for presenting innovative research in Natural Language Processing (NLP) related, but not restricted, to computational and mathematical modeling, analysis and processing of different forms (spoken, handwritten, text, web, etc.) of human language and knowledge creation and management.

The conference was an opportunity for researchers working mainly in the domain of NLP and Knowledge Management to discuss present and future challenges as well as potential collaboration for future progress in the field.

LPKM'2018 included two invited talks and 14 selected research papers.

I would like to record my thanks to all Program Committee members for their high quality of reviewing. I had the honor to collaborate with them as a PC chair.

My thanks go also to the Organizing Committee members chaired by Dr. Seif Mechti and Dr. Mariem Ellouze for the excellent logistical arrangements of the conference. Their efforts made a great contribution to its success. A special thanks goes to Dr. Samira Ellouze who took care of the conference Website.

I would like to acknowledge Prof. Ahmed Hadj Kacem, the Dean of the Faculty of Economics and Management of Sfax who supported the conference financially and logistically. Without his support, the conference could not have been the success that it was.

I also would like to thank Prof. Faiez Gargouri, Head of MIRACL Laboratory for his endless support to all events organized by NLP Research Group of MIRACL Laboratory.

Finally, I would like to offer special thanks to my colleague Prof. Maher Ben Jemâa, who, although no longer with us, continues to inspire us, by his example and dedication to the students he served over the course of his career.

The continuing success of LPKM international conference means that planning can now proceed with confidence for the next event to be held in October 2019 !

LPKM'2018 General chair
Prof. Lamia Hadrich Belguith

COMMITTEES

GENERAL CHAIR:

- Prof. Lamia Hadrich Belguith (ANLP Research Group, MIRACL Lab., FSEG, University of Sfax, Tunisia)

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- Younes Bahou (ANLP Research Group, MIRACL Lab., FSEGS, Tunisia)
- Wassef Louati (ReDCAD Lab., University of Sfax, Tunisia)

LPKM 2018 PROGRAM

Wednesday, October 17th, 2018

8:00-8:30 Registration
8:30-09:00 Opening Ceremony
9h00- 10h30 Invited talk Speaker: Slim Mesfar "NooJ: an NLP platform development for Arabic language" Chair: Lamia Hadrich Belguith
10:30-11:00 Coffee break
11:00-12:30 Session 1 Chairs: Nadia Bouassida and Maher Jaoua **11:00-11:30** Amani Khelifa, Mariem Haoues and Asma Sellami Towards a Software Requirements Change Classification using Support Vector Machine **11:30-12:00** Abir Masmoudi, Rim Laatar, Mariem Ellouze and Lamia Belguith, N-class language model for Tunisian dialect automatic speech recognition system **12:00-12:30** Walid Bannour, Ahmed Maalel and Henda Hajjami Ben Ghezala Towards a collaborative method for crisis management
12:30-14:30 Lunch
14:30-16:00 Session 2 Chairs: Mahmoud Néji and Khouloud Boukadi **14:30-15:00** Amira Barhoumi, Chafik Aloulou, Nathalie Camelin, Yannick Estève and Lamia Hadrich Belguith Arabic Sentiment analysis : an empirical study of machine translation's impact **15:30-16:00** Kheir Eddine Daouadi, Rim Zghal Rebai and Ikram Amous Organization vs. Individual: Twitter User classification
16:00-16:30 Coffee break
16:30-18:00 Session 3 Chairs: Chafik Aloulou and Mariem Ellouze **16:30-17:00** Mabrouka Ben-Sghaier, Wided Bakari and Mahmoud Neji Recognizing Textual Entailment for Arabic using semantic similarity and Word Sense Disambiguation **17:00-17:30** Majda Labiadh, Younès Bahou and Mohamed Hédi Maâloul Complex Disfluencies Processing in Spontaneous Arabic Speech **17:30-18:00** Abdelhakim Benali, Mohamed Hédi Maâloul and Lamia Hadrich Belguith, A symbolic approach for Algerian dialect identification

Thursday, October 18th, 2018

8:00-8:30 Registration
8h30- 10h30 Invited talk Speaker: Hatem Arous "Business intelligence for finance and Management" Chair: Seif Mechti
10:30-11:00 Coffee break

11:00-12:30 Session 4
Chairs: Asma Sellami and Samira Ellouze
11:00-11:30 Hela Bettaieb, Ines Boujelben and Iskandar Keskes,
            Automatic discourse parsing of Arabic text: Building discourse structure of text
11:30-12:00 Mayssa Mtibaa, Zaineb Neji and Mariem Ellouze
            An approach for a Temporal Arabic Question Answering System based on the construction of a
            Temporal Resource
12:00-12:30 Rim Laatar, Chafik Aloulou and Lamia Hadrich Belguith
            A suggested XML model of a dictionary of meanings to help create a historical dictionary for
            Arabic

12:30-14:30 Lunch

14:30-16:30 Session 5
Chairs: Ikram Ammous and Mehdi Boudabbous
14:30-15:00 Mehdi Belguith, Mariem Ellouze and Yannick Estève
            Automatic summarization: Towards a revised extract
15:00-15:30 Mourad Ellouze, Wafa Neifar and Lamia Hadrich Belguith
            Word alignment applied on English-Arabic parallel corpus
15:30-16:00 Lamiche Chaabane
            Resolving Multiple Sequence Alignment Problem Using an Intelligent Cooperative Algorithm

16:00-16:30 Closing