# SHIVA TASLIMIPOOR

Research Group in Computational Linguistics ♦ University of Wolverhampton 

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#### RESEARCH INTERESTS

Natural Language Processing, Multiword Expressions, Semantic Similarity, Figurative Language, Crosslingual Text Processing, Machine Learning and Deep Learning, Reinforcement Learning.

#### **EDUCATION**

# PhD in Natural Language Processing, University of Wolverhampton, UK

2014-2018

. Thesis: Automatic Identification and Translation of Multiword Expressions Supervisor: Prof. Ruslan Mitkov

M. Sc. in Artificial Intelligence, Shiraz University

2009-2012

. Thesis: Automatic Investigation of the Semantics of Persian Compound Verbs Supervisor: Dr. Afsaneh Fazly

B. Sc. in Computer Science and Engineering, Shiraz University

2004-2008

. Thesis: Detecting Openness of Pistachio Nuts Using Image Classification Methods supervisor: Prof. Zohreh Azimifar

#### TECHNICAL SKILLS

Programming Languages
Python, MATLAB, Java, C/C++ (prior experience)
NLP Tools
SpaCy, Gensim, NLTK, SketchEngine, WordNet
Keras (with Tensorflow backend), Scikit-learn

ML Expertise Deep learning, representation learning, classification, regression,

tagging, structured prediction and statistical analysis

# WORK EXPERIENCE

#### Postdoctoral Research Associate

October 2018 - Present

Research Group in Computational Linguistics, University of Wolverhampton

- · Question-answer generation
- · Predicting item characteristics for Multiple Choice Question Answering

# Researcher & Developer

2013 - 2014

Computer Vision and Pattern Recognition Lab, Shiraz University

· Stereopsis problems for traffic analysis project for the municipality of the city of Shiraz

# · Discrete Mathematics, Jahrom University

Fall 2012 & Spring 2013

- · Data Structures, Jahrom University
- · Intro. to Formal Languages & Automata, Andisheh Institute of higher Education
- · Artificial Intelligence, Andisheh Institute of higher Education and Azad University of Jahrom
- · Supervisory of B.Sc projects, Jahrom University
  - . VSMs in Semantics, Document Categorization, Text Summerization, Spam Filtering, MT, etc.

#### SELECTED PROJECTS

Instructor

#### Multiword Expression (MWE) identification

July 2014 - Present

- proposed a sequence labelling model that combined Graph Convolutional Neural Networks with Self-Attention improving state-of-the-art on a standard multi-lingual dataset

- designed language-independent neural sequence labelling methods to identify MWEs (implemented in Keras and ranked 1st in Parseme 2018 shared task on "automatic identification of verbal MWEs"
- proposed a classification approach to disambiguate idiomatic expressions (using gensim & sklearn)
- re-examined standard evaluation for MWEs & proposed a more accurate cross-validation method
- utilised features derived from eye tracking data to improve MWE identification

# Extracting Translation Equivalents (TE)

July 2014 - June 2018

- proposed an original semi-supervised word2vec-based method to extract TEs for MWEs
- developed and exploited comparable corpora for low resource languages

# **Irony Detection**

October 2017 - January 2018

- developed irony detection system using sentiment and embedding features, which **ranked 3rd** in SemEval 2018 shared task 3 "Irony detection in English tweets"

#### Semantic Discrimination

November 2017 January 2018

- developed a model using SketchEngine, ConceptNet, embeddings & google Ngrams, which **ranked**4th (joint) in SemEval 2018 shared task 10 "Capturing Discriminative Attributes"

# ACADEMIC ACHIEVEMENTS

Best paper award in RANLP 2017

Best paper award by a young researcher in Europhras2015

PARSEME grant for the 2nd training school

Ph.D. Scholarship from the University of Wolverhampton, UK, (2014-2017)

#### COMMUNITY SERVICE

Editorial Assistant

2014 - Present

Cambridge Journal of Natural Language Engineering

# Organising Committee Member

- Summer School on Deep Learning in NLP (DLinNLP), Varna, Bulgaria 29-30 August 2019

  . I will be an instructor for a practical coding session on sequence labelling and multi-task learning
- EUROPHRAS 2017, London, UK

13-14 November 2017

• Student Research Workshop, held in conjunction with EUROPHRAS 2017, London, UK.

# Programme Committee Member & Reviewer

RANLP 2019, EUROPHRAS 2019, JNLE, SemEval 2019 & 2018, RANLP 2017, SLSP 2017, CICLing 2017, RANLP 2015, AISP 2012

#### SELECTED PUBLICATIONS

Bridging the Gap: Attending to Discontinuity in Identification of Multiword Expressions, O. Rohanian, S. Taslimipoor, S. Kouchaki, L. A. Ha, R. Mitkov, accepted for publication in NAACL-HLT, 2019. (Equal collaboration with the first author)

GCN-Sem at SemEval-2019 Task 1: Semantic Parsing using Graph Convolutional and Recurrent Neural Networks, S. Taslimipoor, O. Rohanian, S. Moze, In SemEval 2019 Task 1, 2019.

Identification of multiword expressions: A fresh look at modelling and evaluation, S. Taslimipoor, O. Rohanian, R. Mitkov, A. Fazly. In *Multiword expressions at length and in depth. Extended papers from the MWE 2017 workshop*, Language Science Press, 2018.

Wolves at SemEval-2018 Task 10: Semantic Discrimination based on Knowledge and Association, S. Taslimipoor, O. Rohanian, L. A. Ha, G. Corpas, R. Mitkov. In SemEval, 2018.

Investigating the opacity of verb-noun multiword expression usages in context, S. Taslimipoor, O. Rohanian, R. Mitkov, and A. Fazly, in *proceedings MWE@EACL*, 2017.

Bilingual Contexts from Comparable Corpora to Mine for Translations of Collocations, S. Taslimipoor, R. Mitkov, G. Corpas, A. Fazly, in *CICLing*, 2016.

Using Noun Similarity to Adapt an Acceptability Measure for Persian Light Verb Constructions, S. Taslimipoor, A. Fazly and A. Hamzeh: In *LREC'12*, 2012.