

# SHIVA TASLIMPOOR

Natural Language and Information Processing Research Group ◊ University of Cambridge

☎ (+44)7448979927 ◊ ✉ sh.taslimi@gmail.com ◊ 🌐 shivaat.github.io ◊ 📄 https://github.com/shivaat

## RESEARCH INTERESTS

---

Natural Language Processing, Multiword Expressions, Semantic Similarity, Figurative Language, Automatic Language Teaching and Assessment, Machine Learning and Deep 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

**ML Tools**

Keras (with Tensorflow backend), PyTorch, Scikit-learn

**ML Expertise**

Deep learning, representation learning, classification, regression, tagging, structured prediction and statistical analysis

## WORK EXPERIENCE

---

**Postdoctoral Research Associate**

*October 2019 - Present*

*Natural Language and Information Processing Research Group, University of Cambridge*

**Postdoctoral Research Associate**

*October 2018 - September 2019*

*Research Group in Computational Linguistics, University of Wolverhampton*

**Research Assistant**

*2014 - 2018*

*Research Group in Computational Linguistics, University of Wolverhampton*

. Research towards PhD (refer to Section Selected Projects)

**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

**Instructor**

*Fall 2012 & Spring 2013*

*Jahrom Universities, Iran*

. **Discrete Mathematics**

. **Artificial Intelligence**

. **Data Structures**

. **Intro. to Formal Languages & Automata**

. **Supervisory of B.Sc projects**

. VSMs in Semantics, Document Categorization, Text Summerization, Spam Filtering, MT, etc.

## SELECTED PROJECTS

---

**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 PARSEME training school, Summer 2016

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

### **COMMUNITY SERVICE**

---

#### **Editorial Assistant**

*2014 - 2019*

Cambridge Journal of Natural Language Engineering

#### **Organising Committee Member**

- Summer School on Deep Learning in NLP (DLinNLP), Varna, Bulgaria *29-30 August 2019*  
I was also an instructor for a practical coding session on sequence tagging & multitask learning
- EUROPHRAS 2017, London, UK *13-14 November 2017*
- Student Research Workshop, held in conjunction with EUROPHRAS 2017, London, UK.

#### **Programme Committee Member & Reviewer**

ACL 2020, OxBridge 2020 WinAI, RANLP (2019, 2017 & 2015), EUROPHRAS 2019, JNLE, SemEval 2019 & 2018, SLSP 2017, CICLing 2017, AISP 2012

### **SELECTED PUBLICATIONS**

---

**Verbal Multiword Expressions for Identification of Metaphor**, O. Rohanian, M. Rei, S. Taslimipoor, L. A. Ha, *accepted for publication in ACL*, 2020.

**Incorporating Multiword Expressions in Phrase Complexity Estimation**, S. Gooding, S. Taslimipoor, E. Kochmar, *accepted for publication in READI workshop at LREC*, 2020.

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

**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.