

## http://hanwenjuan.com hanwj@shanghaitech.edu.cn | (+86)15221317971

# **EDUCATION**

# LOS ANGELES (UCLA)

VISITING STUDENT May, 2019 to NOW

## SHANGHAITECH UNIVERSITY

#### DS IN COMPUTER SCIENCE

Joint Supervision of Shanghai Institute of Microsystem And Information Technology Grad. Expected January, 2020 Cum. GPA: 3.51 / 4.0

## NANJING UNIVERSITY OF POSTS AND TELECOMMUNICA-**TIONS**

**BS IN OPTICAL INFORMATION** SCIENCE AND TECHNOLOGY Grad. July 2014 Cum. GPA: 3.44 / 4.0

# LINKS

Github://WinnieHAN LinkedIn://weniuan-han Personal Website:// hanwenjuan

# RFFFRFFS

#### Kewei Tu (supervisor)

tukw@shanghaitech.edu.cn

#### Shenghua Gao

gaoshh@shanghaitech.edu.cn

# AVAII ABII ITY

January, 2019

# COURSEWORK

## **GRADUATE**

Artificial Intelligence Deep Learning Computer Graphics Computer Version Mobile Robotics Compressive Sensing

#### **UNDERGRADUATE**

Probability and Stochastic Processes Software Design

## PUBLICATIONS

# UNIVERSITY OF CALIFORNIA, ENHANCING UNSUPERVISED GENERATIVE DEPENDENCY PARSER WITH **CONTEXTUAL INFORMATION**

Wenjuan Han, Yong Jiang, Kewei Tu | ACL 2019

Proposed an autoencoder framework that combines generative and discriminative approaches in order to tackle the limitation of unrealistic conditional independence assumption often assumed in unsupervised dependency parsing

## DEPENDENCY GRAMMAR INDUCTION WITH NEURAL LEXICALIZATION AND **BIG TRAINING DATA**

Wenjuan Han, Yong Jiang, Kewei Tu | EMNLP 2017

Conducted a systematic study regarding the impact of the degree of lexicalization and the training data size on the accuracy of grammar induction approaches

# COMBINING GENERATIVE AND DISCRIMINATIVE APPROACHES TO Unsupervised Dependency Parsing via Dual Decomposition

Yong Jiang, Wenjuan Han, Kewei Tu | EMNLP 2017

Proposed a new learning strategy that can learn a generative model and a discriminative model jointly based on the dual decomposition method

#### Unsupervised Neural Dependency Parsing

Yong Jiang, Wenjuan Han, Kewei Tu | EMNLP 2016

Proposed the first neural probabilistic model to unsupervised dependency parsing

#### LATENT VARIABLE AUTOENCODER

Wenjuan Han, Ge Wang, and Kewei Tu | IEEE Access 2019 volume 7, issue 1, page 48514-48523,

Applied the proposed model at ACL2019 for two application (the perceptual grouping task and the POS induction task) to verify the flexibility of the autoencoder framework. The flexibility of our framework allows us to apply it to various scenarios where the explicit inference of hidden variables is desired

# LEXICALIZED NEURAL UNSUPERVISED DEPENDENCY PARSING

Wenjuan Han, Yong Jiang, Kewei Tu | NeuroComputing 2019

Combine the dependency parsing with the rich nonlinear featurization of neural network approaches and lexicalized features

## OPTICAL FIBER ENERGY TRANSMISSION SYSTEM INTERLOCKING PROTECTION DEVICE

Publication number: CN104009451A | PATENT 2017

# RESEARCH INTERESTS

My research interest is in natural language processing and machine learning. My current research focuses on the study of probabilistic/neural models and follows two researching paths: (1) grammar-based representation, inference, and unsupervised learning; and (2) the application of unsupervised learning approaches with hidden variables in a variety of artificial intelligence areas including grammar induction, POS induction and perceptual grouping.



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# SKILLS

## **PROGRAMMING**

Advanced:

Python • Java • Pytorch

Intermediate:

Keras • Tensorflow • ATEX

Familiar:

Shell • C • C++

# **EXPERIENCE**

REVIEWER ACL 2019
REVIEWER INLG 2019
REVIEWER IEEE ACCESS
TA CS281 COURSE | ARTIFICIAL INTELLIGENCE
TA SUMMER COURSE | WEB TECHNOLOGY
PRESIDENT MACHINE LEARNING READING CLUB

# **AWARDS**

2015-2017 Learning Scholarship 2015-2017 Excellent Student

2017 3<sup>th</sup> Place

China Post-Graduate Mathematical Contest in Modeling

2015 Outstanding Volunteer Award

ShanghaiTech Symposium on Data Science