# Sijia Ge

E-mail: Sijia.Ge@colorado.edu Smiley Court, 1300 30<sup>th</sup> St. Mobile: (720)5307370 Boulder, Colorado, 80303

### **EDUCATION**

Department of Linguistics, University of Colorado-Boulder	Aug.2021-Now
M.S Computational Linguistics(CLASIC)	Expected:Jun.2023
School of Chinese Language and Literature, Nanjing Normal University	Sep.2016-Jun.2019
M.A Linguistics&Applied Linguistics (with Concentration on Computational Linguistics)	GPA:86.3/100(overall)
School of Chinese Language and Literature, Shanxi University	Sep.2012-Jul.2016
B.A Chinese Language and Literature	85.8/100(overall)

### PROFESSIONAL EXPERIENCE

# Beijing Lingosail Tech Co., Ltd.

Product Manager Intern, Beijing

Mar.2021-June.2021

- Design the prototype of the new products including basic UI, function and interaction
- Schedule the overall progress of development as well as promotion model
- Test the function of new products with black box testing

### PROJECT&RESEARCH

# A Joint Model of Automatic Sentence Segmentation and Lexical Analysis for Ancient Chinese

Research Assistant, Nanjing Normal University

Sep.2018-Mar.2019

- Established a seq2seq model for sentence segmentation and lexical analysis based on Bi-LSTM-CRF and TensorFlow
- Transferred two separated tasks into one task, the F1-score of sentence segmentation, word segmentation, and POS reached 78.95,85.73% and 72.65% separately, with an average increase of 3.5%, 0.18%, and 0.35% respectively

### **Annotated Imagery Corpus of Three Hundred Tang Poems**

Research Leader, Nanjing Normal University

Jul.2018-Jan.2019

- Annotated 4496 imageries occurring in the Three Hundred Tang Poems based on HowNet
- Designed the semantic annotation system including the literal meaning and the metaphorical meaning

# Named Entity Recognition on Chinese Classics Based on Bi-LSTM-CRF

Research Assistant, Beijing Gulian Corporation

Oct.2017-Mar.2018

- Established an interface for named entity recognition on Chinese classics based on Bi-LSTM-CRF and utilized trie-tree for correcting with an F-score of 82.3% on *ZuanZhuan*
- Deployed the environment for deep learning, stress testing, and function testing

# **Chinese Abstract Meaning Representation Corpus**

Team Member, Nanjing Normal University

Jul.2017-Mar.2018

- Counted the distribution of semantic roles for the predicate in 5000 sentences automatically
- Compared the data with semantic roles labeling based on Chinese PropBank to verify the efficiency of AMR for solving the conflicts between core and non-core roles, representation of multi-functional roles, and solution to dropped roles

### The Platform for monitoring the popularity of Mandarin Chinese

Team Member, The Education Department of Jiangsu Province

Dec.2016-Dec.2017

- Developed a web platform based on spring framework for recording the nationwide result of the survey for Mandarin Chinese popularity
- Implemented the import and export data of Excel and audio files

# **Chinese FrameNet corpus**

Team Member, Shanxi University

Nov.2015-Mar.2016

- Extended the core word of six frames and annotated about 300 sentences for these frames
- Participated in the discussion of the annotation rules

### RELATED SKILLS

**Technical**: Python, Genism, Nltk, Scikit-learn, Keras, Tensorflow, SQL, Django, HTML, Axure, Java, CentOS, SPSS, Latex **Language**: Mandarin Chinese(Native), English(Fluent)

### **SELECTED PUBLICATION**

### **Paper**

Ning Cheng, Bin Li, Liming Xiao, Changwei Xu, **Sijia Ge**, Xingyue Hao, Minxuan Feng. Integration of Automatic Sentence Segmentation and Lexical Analysis of Ancient Chinese based on BiLSTM-CRF Model. *Proceedings of LT4HALA* 2020 - 1st Workshop on Language Technologies for Historical and Ancient Languages. Marseille, France, 2020:52-58.

Xingyue Hao, **Sijia Ge\***, Yang Zhang, Yuling Dai, Peiyi Yan, and Bin Li. The Construction and Analysis of Annotated Imagery Corpus of Three Hundred Tang Poems. J.-F. Hong et al. (Eds.): *Proceedings of the 20th Chinese Lexical Semantics Workshop (CLSW 2019)*, *LNAI 11831*, pp. 517–524, 2020.

Li Song, Yuan Wen, **Sijia Ge**, Bin Li, Junsheng Zhou, Weiguang Qu and Nianwen Xue. An Easier and Efficient Framework to Annotate Semantic Roles: Evidence from the Chinese AMR Corpus. *The 13th Workshop on Asian Language Resources on LREC 2018*. Miyazaki, Japan, May 07, 2018:29-35.

#### **Patent**

A Method and System of Automatic Lexical Analysis for Ancient Chinese. (the 3<sup>rd</sup> applicant).2019. No.CN201910085019.3

### **OTHER EXPERIENCE**

## A Representative of 19th Graduate Congress

May.2018

### Volunteer for the China National Conference on Computational Linguistics 2017(CCL 2017)

Oct.2017

guided the guests, in charge of the dormitory for over 400 attendees

### **Volunteer for the Museum of Shanxi Province**

Nov.2012-May.2013

worked as a tour guide at the showroom about the history of Chinese coins