### Su WANG

## 305 E. 23rd Street STOP B5100 Austin, TX, 78712 (716) 578-5920 shrekwang@utexas.edu

#### **EDUCATION**

Ph.D. in Computational Linguistics (GPA 4.0)

Advisors: Katrin Erk (Linguistics); Greg Durrett (CS)

M.S. in Statistics (GPA 4.0)

University of Texas at Austin, Austin, TX

M.A. in General Linguistics Computer Science Minor (GPA 4.0) University at Buffalo, Buffalo, NY 2012 - 2015

M.A. in Applied Linguistics Yunnan University, China 2009 - 2012

#### PUBLICATIONS PEER-REVIEWED

- [1] **Su Wang**, Rahul Gupta, Nancy Chang, Jason Baldridge. A Task in a Suit and a Tie: Paraphrase Generation with Semantic Augmentation. AAAI 2019 (POSTER).
- [2] Su Wang, Eric Holgate, Greg Durrett and Katrin Erk. Picking Apart Story Salads. EMNLP 2018 (POSTER).
- [3] Su Wang, Greg Durrett and Katrin Erk. Modeling Semantic Plausibility by Injecting World Knowledge. NAACL 2018 (ORAL).
- [4] Su Wang, Stephen Roller and Katrin Erk. Distributional model on a diet: One-shot word learning from text only. IJCNLP 2017 (ORAL).
- [5] Su Wang, Elisa Ferracane and Raymond Mooney. Leveraging discourse information efficiently for authorship attribution. IJCNLP 2017 (ORAL).

# OTHER WORK

- Su Wang and Joshua Levy. (2017). Named Entity Recognition in Practice. Journal of KUST. Vol2.
- [2] Su Wang. (2017). Non-Cooperative Behavior in Conversational Interaction. Journal of KUST. Vol1.
- [3] Su Wang. (2013). The Representation of Topological Relations in Naxi Language A Statistical Approach. in Cha-Ma Ancient Trail Research Anthology, (Shiyuan Wang eds.). Vol3. Yunnan University Press: Kunming.
- [4] Su Wang. (2013). On a Descriptive Word Classification of "Proto-Unergative—Proto-Unaccusative" Verbs. Journal of Yunnan Normal University. Vol3.

## Talks

- [1] An Introduction to Topic Modeling. NLP Day 2017, Austin TX. (Link: http://globaldatageeks.org/nlpdaytx17/sessions#wang)
- [2] Exploring Question-Answering System: Named Entity Recognition & Sentence Similarity Measure in Practice. DataDay Texas 2017, Austin, TX.

ACADEMIC EXPERIENCE Research Assistant

2018 - Present

EMPLOYER: Katrin Erk, PhD.,

Department of Linguistics, University of Texas at Austin.

PROJECT: DARPA-AIDA

Narrative based hypothesis generation using event coherence and probabilistic inference.

RESEARCH FOCUS:

- Semantic coherence.
- Pre-/post-conditions.
- Neural networks and Probabilistic Programming.

Research Assistant

2017 - 2018

EMPLOYER: Katrin Erk, PhD.,

Department of Linguistics, University of Texas at Austin.

PROJECT: Deep Natural Language Understanding

with Probabilistic Logic and Distributional Similarity (DEEPsem)

(NSF Grant No. 1523637)

RESEARCH FOCUS:

- Semantic space and representation.
- Inference from embeddings.
- Neural networks.

Research Assistant

2016 - 2017

EMPLOYER: Katrin Erk, PhD.,

Department of Linguistics, University of Texas at Austin.

PROJECT: Deep Exploration and Filtering of Text (DEFT)

RESEARCH FOCUS:

- Word Property Learning with Bayesian Hierarchical Models.
- Representation of Abstract Knowledge.

Teaching Assistant

2015 - 2016

EMPLOYER: Katrin Erk, PhD.,

Department of Linguistics, University of Texas at Austin.

Courses

- LIN353C Introduction to Computational Linguistics (Spring 2016)
- LIN350 Analyzing Linguistics Texts (Fall 2015)

RESPONSIBILITIES: Grading and answering programming questions; occasional lectures.

Lab Researcher 2012 - 2014

LAB NAME: Semantic Typology Lab, University at Buffalo.

RESEARCH FOCUS:

- Quantitative methods in crosslinguistic study of semantic typology.
- Sino-Tibetan languages (Yi, Bai and Naxi).

Research Assistant

2009 - 2012

EMPLOYER: Liquan Yang, PhD. (Peking University), Department of Linguistics, Yunnan University.

RESEARCH FOCUS:

- Statistical modeling in semantics (indigenous languages of Yunnan).
- Language Documentation (Yi, Bai and Naxi).

ACADEMIC AWARDS Research Excellence Award in Natural Language Processing (NNSFC) 2018 - 2020

Professional Development Award

2017 - 2019

SPONSOR INSTITUTION: Department of Linguistics, UT Austin

Professional Development Scholarship

2012 - 2015

SPONSOR INSTITUTION: Hua Ruan Software

PROGRAM: Master in General Linguistics (CS Minor), University at Buffalo

Graduate Scholarship

2009 - 2012

SPONSOR INSTITUTION: Yunnan University

Program: Master in Applied Linguistics, Yunnan University

PROFESSIONAL Software Engineer PhD Intern

Summer 2019

**EXPERIENCE** EMPLOYER: Google Inc., Mountain View, CA

SUPERVISOR: Jason Baldridge Co-supervisors: Rahul Gupta

PROJECTS: Grounded semantics (TBD).

Software Engineer PhD Intern

Summer 2018

EMPLOYER: Google Inc., Mountain View, CA

Supervisor: Nancy Chang

Co-supervisors: Rahul Gupta, Jason Baldridge

PROJECTS: Efficient Paraphrase Generation with Structured Semantic Knowledge.

NLP Data Scientist Intern, Technical Consultant

2016 - Present

EMPLOYER: OJO Labs Inc., Austin, TX SUPERVISOR: Joshua Levy, Chief Scientist.

(PhD. in Computer Science, University of North Carolina at Chapel Hill)

RESPONSIBILITIES: Consultation for linguistics-related NLP problems; Software engineer; Development of Question-Answering system.

PROJECTS:

- Named Entity Recognition System for OJO Chatbot.
- Information Retrieval system for real estate search.

Technical Consultant

2012 - Present

Software Engineer

2009 - 2012

EMPLOYER: Hua Ruan Software, Yunnan, China

RESPONSIBILITIES: Software engineer; NLP solutions; Statistics consultation.

Project: Identity Verification System.

Test Analyst, Instructor

2009 - 2011

EMPLOYER: Century Youth Education, Yunnan, China

RESPONSIBILITIES: Teaching test-taking skills IELTS and TOEFL. AWARDS: Best Instructor (2010,2011); Best Average Scoring (2011).

TECHNICAL SKILLS

PROGRAMMING: Python, Java, C/C++, Prolog, R (Most Proficient in Python), working knowledge of HTML, CSS, JavaScript.

 ${\tt STATISTICS:}\ \ {\tt Neural\ Network\ Architectures},\ {\tt Bayesian\ Inference};\ {\tt Hierarchical\ Models};$ 

Mathematical Statistics.

LANGUAGE SKILLS MANDARIN CHINESE: Native.

ENGLISH: Fluent.
JAPANESE: Beginner.

# TECHNICAL TUTORIALS

[1] A Brief Tutorial on Machine Learning.

[2] Notes on Statistical Learning.

[3] Generative Adversarial Networks (GAN): A Gentle Introduction.

[4] Bayesian Statistical Methods: A Primer.

[5] EM-algorithm and Clustering: a Tutorial.

[6] Topic Modeling: A Complete Introductory Guide.