YULING GU

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EDUCATION

New York University, New York, NY   August 2016 - May 2020

Double major: Computer Science (Honors), Language and Mind (Joint major in linguistics, psychology and philosophy); Minor: Mathematics

· Current cumulative GPA: 3.988
· Relevant Coursework: Machine Learning for Language Understanding, Introduction to Machine Learning, Artificial Intelligence, Natural Language Processing, Theory of Computation, Numerical Computing, Operating Systems, Basic Algorithms, Computer Systems Organization, Data Structures, Discrete Mathematics, Linear Algebra, Calculus 3, Probability & Statistics, Statistics for The Behavioral Sciences, Minds and Machines, Language and Mind, Perception, Cognition, Sound and Language, Grammatical Analysis, Introduction to Semantics, Neural Bases of Language

TECHNICAL SKILLS

Computer Languages	Java, Python, R, MATLAB, Unix, C
Software & Tools	LaTeX, SPSS Statistics, Praat(for analysis of speech)
Natural Languages	Bilingual in English and Mandarin Chinese, Conversational Shanghainese

RESEARCH EXPERIENCE

Honors Thesis Project: Detecting temporal relations in text   Spring 2019 - Present

· Supervised by Prof. Ernest Davis. Combining various computational methods, word and sentence representations, as well as linguistics theories to automatically detect temporal relations implicitly conveyed in texts; Analyzing the performance of state-of-the-art models in detecting implicit meaning from a psycholinguistics perspective

Can dependency parsing help event extraction in text?   Fall 2019 - Present

· Supervised by Prof. Ralph Grishman. Investigating the contribution of information from dependency parsing, Named Entity (NE) tagging, and Part Of Speech (POS) tagging in event extraction

Integrated Customization Environment for Information Extraction (ICE)   Summer 2019

· Supervised by Prof. Ralph Grishman. Experimenting with different classifiers, together with grammatical linguistics insights, to automatically distinguish prepositional phrases as adjuncts or arguments

Termolator: A terminology extraction system   Summer 2018 - Fall 2018

· Supervised by Prof. Adam Meyers. Refining distributional metrics from the English Termolator; Further development of the Chinese Termolator; Merging the Chinese and English Termolator as one unified system

Independent study project: Commonsense Reasoning   Summer 2018

· Supervised by Prof. Ernest Davis. Looking at English-Chinese Machine Translation failures; Designing Winograd schemas and compiling pronoun disambiguation problems; Toward Annotating Commonsense Inferences in Text (TACIT) annotation

***Research intern*: Human Language Technology Group**
Institute for Infocomm Research, A*STAR, Singapore, Singapore   January 2014 - Present

· Characterizing Singaporean, American, and British English acoustic and pronunciation patterns in children's speech (supervised by Dr. Nancy F. Chen); Chinese tone perception in Singaporean and native Chinese Mandarin speakers; Investigating tone in whispered Mandarin (jointly supervised by Dr. Boon Pang Lim and Dr. Nancy F. Chen)

WORK EXPERIENCE

New York University (NYU)   Spring 2019, Fall 2019

· Grader for Artificial Intelligence course at Courant Institute of Mathematical Sciences (CIMS) under Prof. Ernest Davis. (Fall 2019)
· Grader for Basic Algorithms course at Courant Institute of Mathematical Sciences (CIMS) under Prof. Victor Shoup. (Spring 2019)

PUBLICATIONS

Published Papers:

Yuling Gu and Nancy F. Chen (2019). "Acoustic Characterization of Singaporean Children's English: Comparisons to American and British Counterparts". *Widening NLP workshop 2019.* Poster presented at WiNLP workshop at ACL 2019, Florence, Italy.

Yuling Gu, Boon Pang Lim and Nancy F. Chen (2016). "Perception of tone in whispered Mandarin sentences: the case for Singapore Mandarin". *Proceedings of Interspeech 2016.* Poster presented at Interspeech 2016, San Francisco, CA, USA.

Published Abstracts:

Yuling Gu and Nancy F. Chen (2019). "Large-scale acoustic characterization of mid-low vowels across American, British, and Singaporean children". *The Journal of Acoustical Society of America, Volume 146, Issue 4.* Poster to be presented at 178th Meeting of the Acoustical Society of America in San Diego, CA, USA.

Yuling Gu and Nancy F. Chen (2019). "Acoustic characterization of Singaporean children's English with American and British counterparts: A case study on approximants". *The Journal of Acoustical Society of America, Volume 146, Issue 4.* Poster to be presented at 178th Meeting of the Acoustical Society of America in San Diego, CA, USA.

In preparation:

Large-Scale Acoustic Characterization of Singaporean Children's English: Comparisons to American and British Counterparts using Archetypal Analysis (in preparation for Speech Communication journal submission); Investigating BERTs knowledge of hidden meanings: using the psycholinguistic phenomenon of coercion (in preparation for ACL 2020 submission); Towards an understanding of tense and aspectual information: temporal relations in Sesame street (in preparation for ACL 2020 submission)

CONFERENCES

178th Meeting of the Acoustical Society of America in San Diego, California. (ASA travel grant, Dean's Undergraduate Research Fund conference grant); One of only 4 undergraduate students from CIMS selected to represent NYU at 2019 Grace Hopper Celebration of Women in Computing in Orlando, FL, USA; ACL 2019, Florence, Italy. (WiNLP travel grant, Dean's Undergraduate Research Fund conference grant); Interspeech 2016, San Francisco, CA, USA. (ISCA travel grant)

AWARDS

Acoustical Society of America travel grant; 4th time recipient of Dean's Undergraduate Research Fund (Spring 2018 Individual Research Grant, Spring 2019 Individual Research Grant & 2 Conference Grants); Widening NLP workshop at ACL travel grant (for ACL 2019); Bernice Nachman Marlowe Scholarship (Fall 2018 – Present); Steffi Berne Scholarship (Fall 2018 – Present); Dean's List for Academic Year (Fall 2016 & Spring 2017, Fall 2017 & Spring 2018, Fall 2018 & Spring 2019); Presidential Honors Scholars (Fall 2017 – Present); Women In Science (WINS) Scholarship (Fall 2017 – Present); ISCA travel grant (for Interspeech 2016)

EXTRA-CURRICULAR ACTIVITIES

Women in Science visibility committee: liaison (Fall 2017 – Present); Presidential Honors Scholars Program (Fall 2017 – Present); League of Linguistics interest group (Fall 2017 – Present); Dean's Honors Service Corps (Fall 2017 – Present); Minority And Philosophy chapter (Spring 2017 – Present)