RESEARCH INTEREST Natural Language Processing (NLP), computational social science, fairness in NLP, model interpretability, language generation in interactive environment, and transfer learning on text with limited annotation

**EDUCATION** 

Cornell University, Ithaca, New York M.Eng., Computer Science, December 2019

GPA: 4.0/4.0

Shanghai JiaoTong University, Shanghai, China

Major: B.S., Computer Science, June 2018 GPA: 88.2% Minor: B.E., Finance, June 2018 GPA: 90.4%

PAPER UNDER REVIEW

**Jialu Li**, Esin Durmus and Claire Cardie. Exploring the Role of Argument Structure in Online Debate Persuasion. *Under submission at ACL*, 2020.

PAPER IN PREPARATION

Jialu Li, Shivank Goel, Heather Zheng and Claire Cardie. Should John Be More Likely A Physician Than Lisa: Bias-Performance Trade-Off for Gendered Pronoun Resolution

HONORS AND AWARDS

Academic Excellence Scholarship (Third-Class) for 2016-2017 academic year Academic Excellence Scholarship (Third-Class) for 2015-2016 academic year Academic Excellence Scholarship (Second-Class) for 2014-2015 academic year

ACADEMIC RESEARCH Cornell University, Ithaca, New York

Research Assistant February 2019 - Present

Advisor: Professor Claire T. Cardie

- Explored the relationship between argument structure and persuasion in online debates
- Applied BERT for sentence representation, generated argument structure on Debate.org and proposed three sets of argument features; employed LSTM for persuasion prediction with 77.38% accuracy and showed that personal experience and 'Claim-Reason-Rephrase' structure are powerful in making convincing arguments

# Cornell University, Ithaca, New York

Research Project February 2019 - May 2019

Advisor: Professor Claire T. Cardie

- Explored the methods to tackle two sources of gender bias among state-of-the-art coreference resolvers
- Implemented different approaches of debiasing word embedding and anonymizing data; applied them on CNN and bi-directional LSTM with scoring architecture using attention mechanism; observed a bias performance trade-off when using debiased resources and approaches

#### Cornell University, Ithaca, New York

Research Group Leader for 2 projects
Advisor: Professor Claire T. Cardie

September 2019 - Present

• Annotated argument type in online debates for future study; our proposed annotation scheme considers both debate strategies and extra-propositional meaning and has competitive Krippendorffs alpha with existing work

• Explored what linguistic features or user features are important to predict whether users will change their stance during the debates; Find that users' opinion on big issues and the talking points between two sides are most predictive of persuasion

### Cornell University, Ithaca, New York

Research Project September 2019 - December 2019

Advisor: Professor Christopher De Sa

- Built a daily long-short portfolio of various stocks with both twitter text data and general market data in 2014-2016 of 85 stocks
- $\bullet$  Predicted exact return rate of various stocks based on bi-directional LSTM with attention over twitts from different users; Built long-short portfolio with stocks that have a daily return rate of 0.095%

### Shanghai JiaoTong University, Shanghai, China

Undergraduate Thesis September 2017 - June 2018

Advisor: Professor Weinan Zhang

- Collaborated with TouchPal Big Data Team for further researches in app usage prediction
- $\bullet$  Applied LSTM with attention to predict the next application the user may use based on usage history, and the recall rate of the results reached 80%

#### Shanghai JiaoTong University, Shanghai, China

Research Assistant October 2016 - August 2017

Advisor: Professor Haining Lu

- Participated in the development of Hcash a decentralized and open-source cross platform cryptocurrency
- Built a bitcoin private testnet which can be used to analyze the correlation between difficulty and coin generation speed statistically

### TEACHING EXPERIENCE

## Natural Language Processing (CS 4740 / CS 5740)

Graduate Teaching Assistant August 2019 - December 2019

Instructor: Professor Claire T. Cardie

# SERVICE Fangyang's Lecture on Humanity

Volunteer September 2012 - Present

• Prepare lecture slides on Chinese literature; dictate lecture recordings for future publishing; teach junior school students about the history of the city through field trips