

Jialu Li

jialuli@cs.unc.edu
(607) 262 2654

- EDUCATION** **University of North Carolina, Chapel Hill**, Chapel Hill, North Carolina
2nd year Ph.D., Computer Science, *Advisor: Professor Mohit Bansal*
- Cornell University**, Ithaca, New York
M.Eng., Computer Science, *Advisor: Professor Claire Cardie*
- Shanghai JiaoTong University**, Shanghai, China
Major: B.S., Computer Science
Minor: B.E., Finance
- RESEARCH INTEREST PUBLICATION** Multimodal NLP, Vision-and-Language Navigation
- EnvEdit: Environment Editing for Vision-and-Language Navigation**
CVPR, 2022
Jialu Li, Hao Tan, and Mohit Bansal
- NDH-Full: Learning and Evaluating Navigational Agents on Full-Length Dialogue**
EMNLP, 2021
Hyoungun Kim, **Jialu Li** and Mohit Bansal
- Improving Cross-Modal Alignment in Vision Language Navigation via Syntactic Information**
NAACL, 2021 (short papers)
Jialu Li, Hao Tan and Mohit Bansal
- Exploring the Role of Argument Structure in Online Debate Persuasion**
EMNLP, 2020 (short papers)
Jialu Li, Esin Durmus and Claire Cardie
- PAPER UNDER REVIEW** **Anonymous Submission on Representation Learning in Vision-Language-Navigation**
Under submission at ACL Rolling Review for NAACL
Jialu Li, Hao Tan and Mohit Bansal
- ACADEMIC RESEARCH** **University of North Carolina – Chapel Hill** **March 2021 - Nov 2021**
Advisor: Professor Mohit Bansal
- Analyzed the performance mismatch between different evaluation metrics on a dialogue based navigation task.
 - Analyzed the effect of using different reward for model trained with reinforcement learning, and showed that explicit reward towards the goal position is important for navigation success.
 - Proposed a new task setup that encourages instruction following in Vision-and-Dialogue navigation.
- University of North Carolina – Chapel Hill** **August 2020 - Feb 2021**
Advisor: Professor Mohit Bansal
- Utilized syntax information from dependency tree to enhance alignment between the instruction and the visual scenes in Vision-and-Language Navigation tasks.
 - Improved the non-syntax baseline on multiple Vision-and-Language navigation tasks.

Cornell University

Advisor: Professor Claire T. Cardie

February 2019 - May 2020

- 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

**TEACHING
EXPERIENCE**

Natural Language Processing (CS 4740 / CS 5740)

Graduate Teaching Assistant

August 2019 - December 2019

Instructor: Professor Claire T. Cardie

**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

SKILLS

Programming Languages: Python, C++

Machine Learning Frameworks: Pytorch