

Jialu Li

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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

CLEAR: Improving Vision-Language Navigation with Cross-Lingual, Environment Agnostic Representations

Findings of NAACL, 2022

Jialu Li, Hao Tan, and Mohit Bansal

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 Pre-training in Vision-Language-Navigation

Under submission at EMNLP 2022

Jialu Li and Mohit Bansal

ACADEMIC RESEARCH

University of North Carolina – Chapel Hill

August 2020 - Present

Advisor: Professor Mohit Bansal

- Learned better multi-lingual instruction representation and environment agnostic visual representation with contrastive learning for Vision-and-Language Navigation.
- Proposed an environment-level data augmentation method for Vision-and-Language Navigation to improve agents' generalization to unseen environments.
- Proposed a new task setup that encourages instruction following in Vision-and-Dialogue navigation.
- Utilized syntax information from dependency tree to enhance alignment between the instruction and the visual scenes in Vision-and-Language Navigation tasks.

Cornell University

February 2019 - May 2020

Advisor: Professor Claire T. Cardie

- Explored the relationship between argument structure and persuasion in online debates

INDUSTRY EXPERIENCE	Amazon Applied Scientist Intern Mentor: Gaurav Sukhatme, Aishwarya Padmakumar	May 2022 - August 2022
TEACHING EXPERIENCE	Natural Language Processing (CS 4740 / CS 5740) <i>Graduate Teaching Assistant</i> Instructor: Professor Claire T. Cardie	August 2019 - December 2019
SERVICE	Reviewer for ARR 2022 Jan, Feb Reviewer for ACM MM 2022	
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	