

Jialu Li

jialuli@cs.unc.edu
[jialuli-luka.github.io](https://github.com/jialuli-luka)
(607) 262 2654

EDUCATION	University of North Carolina, Chapel Hill , Chapel Hill, North Carolina Ph.D., Computer Science <i>Advisor: Professor Mohit Bansal</i> August 2020 - Present
	Cornell University , Ithaca, New York M.Eng., Computer Science <i>Advisor: Professor Claire Cardie</i> August 2018 - December 2020
	Shanghai JiaoTong University , Shanghai, China Major: B.S., Computer Science Minor: B.E., Finance September 2014 - June 2018
RESEARCH INTEREST	Multimodal NLP, Vision-and-Language Navigation
PUBLICATION	EnvEdit: Environment Editing for Vision-and-Language Navigation <i>CVPR, 2022</i> Jialu Li, Hao Tan, and Mohit Bansal
	CLEAR: Improving Vision-Language Navigation with Cross-Lingual, Environment Agnostic Representations <i>Findings of NAACL, 2022</i> Jialu Li, Hao Tan, and Mohit Bansal
	NDH-Full: Learning and Evaluating Navigational Agents on Full-Length Dialogue <i>EMNLP, 2021</i> Hyounghun Kim, Jialu Li, and Mohit Bansal
	Improving Cross-Modal Alignment in Vision Language Navigation via Syntactic Information <i>NAACL, 2021 (short papers)</i> Jialu Li, Hao Tan, and Mohit Bansal
	Exploring the Role of Argument Structure in Online Debate Persuasion <i>EMNLP, 2020 (short papers)</i> Jialu Li, Esin Durmus, and Claire Cardie
	Anonymous Submission on Generative Pre-training in Indoor Vision-Language Navigation <i>Under submission at CVPR 2023</i> Jialu Li, and Mohit Bansal
PAPER UNDER REVIEW	Anonymous Submission on Data Augmentation for Outdoor Vision-Language Navigation <i>Under submission at CVPR 2023</i> Jialu Li, Aishwarya Padmakumar, Gaurav Sukhatme, and Mohit Bansal
ACADEMIC RESEARCH	University of North Carolina – Chapel Hill <i>Advisor: Professor Mohit Bansal</i> <ul style="list-style-type: none">• 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

May 2022 - November 2022

Applied Scientist Intern

Mentor: Gaurav Sukhatme, Aishwarya Padmakumar

**TEACHING
EXPERIENCE**

Natural Language Processing (CS 4740 / CS 5740)

Cornell University

Graduate Teaching Assistant

August 2019 - December 2019

Instructor: Professor Claire T. Cardie

SERVICE

Reviewer for ARR, ACL 2022, EMNLP 2022, NAACL 2022

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

REFERENCES

Mohit Bansal

University of North Carolina, Chapel Hill

John R. & Louise S. Parker Professor

mbansal@cs.unc.edu

Gaurav Sukhatme

Amazon

Amazon Scholar

sukhatme@amazon.com

Aishwarya Padmakumar

Amazon

Applied Scientist

padmakua@amazon.com

Claire Cardie

Cornell University

Joseph C. Ford Professor

cardie@cs.cornell.edu

Lillian Lee

Cornell University

Charles Roy Davis Professor

llee@cs.cornell.edu

Weinan Zhang

Shanghai JiaoTong University

Associate Professor

wnzhang@sjtu.edu.cn

SKILLS

Programming Languages: Python, C++

Machine Learning Frameworks: Pytorch