

Meera S. Hahn

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Interests I am interested in studying perceptual embodied AI using deep networks as well as exploring how to harness linguistic information to assist in visual learning tasks.

Employment **Google Research** (2022 - Present)
Research Scientist

Education **Georgia Institute of Technology** (2016 - 2022)
Ph.D. Computer Science
Thesis: “Language Guided Localization and Navigation”
Committee: James M. Rehg (Advisor), Dhruv Batra, Diyi Yang, Peter Anderson, Abhinav Gupta

Emory University (2012 - 2016)
Bachelor of Science, Computer Science
Advisor: Dr. Jinho Choi

Publications **Which way is ‘right’?: Uncovering Limitations of Vision-and-Language Navigation Models**
Meera Hahn, James M. Rehg. Under Submission to ACL 2022

Transformer-based Localization from Embodied Dialog with Large-scale Pre-training
Meera Hahn, James M. Rehg. Under Submission to ACL 2022

No RL, No Simulation: Learning to Navigate without Navigating
Meera Hahn, Devendra Chaplot, Mustafa Mukadam, James Rehg, Shubham Tulsiani, Abhinav Gupta. NeurIPS 2021

Where Are You? Localization from Embodied Dialog
Meera Hahn, Jacob Krantz, Dhruv Batra, Devi Parikh, James Rehg, Stefan Lee, and Peter Anderson. EMNLP 2020

Tripping through time: Efficient Localization of Activities in Videos
Meera Hahn, Asim Kadav, James M. Rehg, and Hans Peter Graf. BMVC 2020

Learning a Visually Grounded Memory Assistant
Meera Hahn, Kevin Carlberg, Ruta Desai, and James Hillis. Arxiv 2020

Action2Vec: A Crossmodal Embedding Approach to Action Learning
Meera Hahn, Andrew Silva, and James M. Rehg. CVPR-W 2018

Localizing and Aligning Fine-Grained Actions to Sparse Instructions
Meera Hahn, Nataniel Ruiz, Jean-Baptiste Alayrac, Ivan Laptev, and James M. Rehg. CVPR-W 2018

Situated Bayesian Reasoning Framework for Robots Operating in Di-

verse Everyday Environments

Sonia Chernova, Vivian Chu, Angel Daruna, Haley Garrison, *Meera Hahn*, Priyanka Khante, Weiyu Liu, and Andrea Thomaz. *ISRR 2017*

Deep tracking: Visual tracking using deep convolutional networks

Meera Hahn, Si Chen, and Afshin Dehghan. *Grace Hopper 2016*

Advances in Methods & Evaluations for Distributional Semantic Models

Meera Hahn, Jinho Choi. *Emory Thesis*

Fellowships & Honors

Presidential PhD Fellowship (2016 - 2020)

Georgia Institute of Technology

Highest Honors on Thesis (2016)

Emory University

Emory Honors Program (2016)

Emory University

Program involves a written thesis, thesis defense, a GPA above 3.5 and graduate coursework

Travel Grant Recipient (2016)

Computing Research Association

Anita Borg Scholarship Recipient (2016)

Travel grant to attend the Grace Hopper Celebration

Emory Honor List & Emory Merit List (2016)

Travel grant to attend the Grace Hopper Celebration

Internships

Facebook Artificial Intelligence Research (May 2020 - January 2021)

Research Internship

Learning an embodied navigation agent.

Advisor: Dr. Abhinav Gupta

Collaborators: Shubham Tulsiani, Devendra Chaplot, Mustafa Mukadam

Facebook Reality Labs (May 2019 - December 2019)

Research Internship

Learning a visually grounded memory assistant.

Advisors: Dr. James Hillis, Dr. Dhruv Batra, Dr. Ruta Desai

NEC Laboratories (May 2018 - August 2018)

Research Internship.

Temporal alignment of activities via language query.

Advisors: Dr. Asim Kadav and Dr. Hans Peter Graf

Amazon (May 2016 - August 2016)

Research and Development Internship.

Shipping material classification via point cloud images.

Advisors: Dr. Marshall Tappen

Amazon (May 2015 - August 2015)

Software Development Engineer Intern.

Developed and deployed an AB Testing framework.

Academic Lab Experience

Computational Perceptual Laboratory of Georgia Tech

Graduate Research Assistant.

(2016 - 2022)

Advisor: Dr. James M. Rehg

- Intersection of language, vision and robotics.
- NIH funded project to monitor and track the progression of autism through behavioral imaging and wearables.

Visual Intelligence Lab of Georgia Tech

Graduate Research Assistant.

(2018 - 2022)

Advisors: Dr. Dhruv Batra, Dr. Devi Parikh and Dr. Peter Anderson

- Language guided navigation in 3D environments.

Emory NLP Research Lab

(Spring 2016)

Research Assistant and Thesis Research.

Advisor: Dr. Jinho Choi

- Novel approaches for distributional semantics.
- Emory NLP toolkit's Named Entity Recognition system.

University of Central Florida

(May 2015 - August 2015)

Research Experience Undergraduate Fellow.

Advisors: Dr. Mubarak Shah and Dr. Afshin Deghan

- Deep convolutional networks for object tracking.

Teaching

Computer Vision - Head TA

(Fall 2019)

Georgia Institute of Technology

ML w/ Limited Supervision - Graduate TA

(Spring 2020) Georgia

Institute of Technology

Professional
Activities

CVPR Reviewer

(2017 – Present)

ECCV/ICCV Reviewer

(2018 – Present)

Women in Computing at Emory

(2015 - 2016) President and Founder

This club is a subsidiary of HACK Emory and gives seminars throughout the year on opportunities for Women In Computing, also serves as a place for women in tech at Emory to network.

Coursework

Computer Vision, Advanced Computer Vision, Computer Vision and Language, Natural Language Processing, Machine Learning, Computability & Complexity & Algorithms, Human Robot Interaction, Statistical Techniques for Robotics, Artificial Intelligence