Meera S. Hahn

meerahahn@google.com — www.meerahahn.net

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"

Commitee: 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 AAMAS 2023

Transformer-based Localization from Embodied Dialog with Large-scale Pre-training

Meera Hahn, James M. Rehg. AACL 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

 $\it Meera~Hahn,$ Jacob Krantz, Dhruv Batra, Devi Parikh, James Rehg, Stefan Lee, and Peter Anderson. $\it EMNLP~2020$

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

(2016)

Travel Grant Recipient 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.

 ${\bf Temporal\ alignment\ of\ activities\ via\ language\ query.}$

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 Perceptional 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 20202) 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