# Meera S. Hahn

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RESEARCH 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.

**EDUCATION** 

## Georgia Institute of Technology

(2016 - present)

PhD, Computer Science

School of Interactive Computing Advisor: Dr. James M. Rehg

**Emory University** 

(2012 - 2016)

Bachelor of Science, Computer Science Major GPA: 3.9/4 Advisor: Dr. Jinho Choi

## PUBLICATIONS No RL, No Simulation: Learning to Navigate without Navigating

Meera Hahn, Devendra Chaplot, Mustafa Mukadam, James Rehg, Shubham Tulsiani, Abhinav Gupta. In Submission

## 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

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 Alavrac, Ivan Laptev, and James M. Rehg. CVPR-W 2018

# Situated Bayesian Reasoning Framework for Robots Operating in Diverse 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

ACADEMIC HONORS Presidential PhD Fellowship

Georgia Institute of Technology

Highest Honors on Thesis (2016)

Emory University

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

INDUSTRY EXPERIENCE Facebook Artificial Intelligence Research

(May 2020 - January 2021)

(2016 - 2020)

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 EXPERIENCE

### Computational Perceptional Laboratory of Georgia Tech

Graduate Research Assistant.

(August 2016 - Present)

- Working at the intersection of language and vision with the goal of improving activity understanding.
- Part of a NIH funded project to monitor and track the progression of autism through behavioral imaging and wearable sensors.

Advisor: Dr. James M. Rehg

Visual Intelligence Lab of Georgia Tech

Graduate Research Assistant.

(August 2016 - Present)

• Working on language guided navigation in 3D environments.

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

# Emory NLP Research Lab

(Spring 2016)

Research Assistant and Thesis Research.

- Worked on a novel approach to word embedding that accounted for sentence dependency structure. Used distributional semantics, dependency tree parsing and neural networks. This research part of Honor's Program senior thesis.
- Worked on the Emory NLP toolkit's Named Entity Recognition system.

Advisor: Dr. Jinho Choi

#### University of Central Florida

(May 2015 - August 2015)

Research Experience Undergraduate Fellow.

• Deep convolutional networks for object tracking. Advisors: Dr. Mubarak Shah and Dr. Afshin Deghan

# **TEACHING EXPERIENCE**

# Computer Vision - Head TA

(Fall 2019)

Georgia Institute of Technology

# ML w/ Limited Supervision - Graduate TA

(Spring 20202) Georgia

Institute of Technology

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

# **COMMUNITY ENGAGEMENT**

### **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.