

Lisa Anne Hendricks

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ABOUT

I am a research scientist at DeepMind. My research is at the intersection of language and vision. I am particularly interested in building explainable, unbiased AI systems.

EDUCATION

UC Berkeley Berkeley, CA
PhD, Electrical Engineering and Computer Science May 2019
Advised by Trevor Darrell
Thesis: *Visual Understanding through Natural Language*
GPA: 3.972

Rice University Houston, TX
B.S.E.E., Bachelor of Science in Electrical Engineering May 2013
Concentration: Signal Processing
GPA: 4.09/4.33, summa cum laude, full-tuition scholarship (Max Roy)

SELECTED PUBLICATIONS

Hendricks, Lisa Anne and Aida Nematzadeh. “Probing Image-Language Transformers for Verb Understanding” In *Findings of the Association of Computational Linguistics (ACL)*, 2021.

Hendricks, Lisa Anne, John Mellor, Rosalia Schneider, Jean-Baptiste Alayrac, Aida Nematzadeh. “Decoupling the Role of Data, Attention, and Losses in Multimodal Transformers.” In *Transactions of the Association of Computational Linguistics (TACL)*, 2021.

Hendricks, Lisa Anne, Oliver Wang, Eli Shechtman, Josef Sivic, Trevor Darrell, Bryan Russell. “Localizing Moments in Video with Temporal Language.” In *Empirical Methods in Natural Language Processing (EMNLP)*, 2018.

Anna Rohrbach*, **Lisa Anne Hendricks***, Kaylee Burns, Trevor Darrell, and Kate Saenko. “Object Hallucination in Image Captioning.” In *Empirical Methods in Natural Language Processing (EMNLP)*, 2018.

Hendricks, Lisa Anne, Ronghang Hu, Trevor Darrell, Zeynep Akata. “Grounding Visual Explanations.” In *European Conference of Computer Vision (ECCV)*, 2018.

Hendricks, Lisa Anne*, Kaylee Burns*, Kate Saenko, Trevor Darrell, Anna Rohrbach. “Women also Snowboard: Overcoming Bias in Captioning Models.” In *European Conference of Computer Vision (ECCV)*, 2018.

Park, Dong Huk, **Lisa Anne Hendricks**, Zeynep Akata, Anna Rohrbach, Bernt Schiele, Trevor Darrell, Marcus Rohrbach. “Multimodal Explanations: Justifying Decisions and Pointing to the Evidence.” In *Computer Vision and Pattern Recognition (CVPR)*, 2018.

Spotlight

Hendricks, Lisa Anne, Oliver Wang, Eli Shechtman, Josef Sivic, Trevor Darrell, and Bryan Russell. “Localizing Moments in Video with Natural Language.” In *International Conference on Computer Vision (ICCV)*, 2017.

Venugopalan, Subhashini, **Lisa Anne Hendricks**, Marcus Rohrbach, Raymond Mooney, Trevor Darrell, and Kate Saenko. “Captioning Images with Diverse Objects.” In *Computer Vision and Pattern Recognition (CVPR), 2017 IEEE Conference*. **Oral**

Hendricks, Lisa Anne, Zeynep Akata, Marcus Rohrbach, Jeff Donahue, Bernt Schiele, and Trevor Darrell. “Generating Visual Explanations.” In *European Conference on Computer Vision (ECCV), 2016*.

Hendricks, Lisa Anne, Subhashini Venugopalan, Marcus Rohrbach, Raymond Mooney, Kate Saenko, and Trevor Darrell. “Deep Compositional Captioning: Describing Novel Object Categories without Paired Training Data” In *Computer Vision and Pattern Recognition (CVPR), 2016 IEEE Conference*. **Oral**

Donahue, Jeff, **Lisa Anne Hendricks**, Sergio Guadarrama, Marcus Rohrbach, Subhashini Venugopalan, Kate Saenko, and Trevor Darrell. “Long-term recurrent convolutional networks for visual recognition and description.” In *Computer Vision and Pattern Recognition (CVPR), 2015 IEEE Conference*. **Oral**

ACADEMIC TALKS

When is Grounding Helpful for Language and Vision Tasks?

Guest Lecture: University of Virginia 2020
Invited Talk: NeurIPS ViGIL Workshop 2019

Diagnosing and Overcoming Bias in Image Captioning

Invited Talk: CVPR VQA Workshop 2019
Invited Talk: ICML How2Challenge Workshop 2019

Localizing Moments in Video with Temporal Language

Empirical Methods in Natural Language Processing (EMNLP) 2018

Generating Natural Language Explanations for Visual Decisions

Imperial College London 2018
Machine Learning and Artificial Intelligence: The Stimulating Challenges (Paris) 2018
AI with the Best 2018

Look, Listen, and Speak: Vision Systems that Communicate with Natural Language

Berkeley CS294-131: Special Topics in Deep Learning (Guest Lecture) 2018
TTIC Young Researcher Seminar Series 2018

Describing and Retrieving Diverse Visual Data with Natural Language

University of Amsterdam 2018

Localizing Moments in Video with Natural Language

Berkeley Artificial Intelligence Research (BAIR) Seminar 2016

Deep Compositional Captioning

Invited Talk: Workshop on Machine Learning in Speech and Language Processing 2016
Computer Vision and Pattern Recognition (CVPR), 2016 IEEE Conference 2016

EXPERIENCE

DeepMind

Language Team

London, UK
Fall 2019-Present
As a member of the Language Team at DeepMind I focus on research questions at the intersection of language and vision.

UC Berkeley

Advised by Trevor Darrell

Berkeley, CA
Fall 2013-Spring 2019
Completed my thesis titled: “Visual Understanding through Natural Language”

Facebook AI Research

Menlo Park, CA

Research Intern, Advised by Devi Parikh and Dhruv Batra Summer 2018
Conducted research on Embodied Question Answering.

Adobe San Francisco, CA
Research Intern, Advised by Bryan Russell Summer 2017
Conducted research on text based video retrieval in the Creative Intelligence Lab (CIL).

Adobe San Francisco, CA
Research Intern, Advised by Bryan Russell Summer 2016
Conducted research on text based video retrieval in the Creative Technology Lab (CTL).

Google Mountain View, CA
Hardware Engineer Intern, Advised by Xiaoyu Miao Summer 2013
Analyzed current technologies of interest to the Google Glass hardware team. Met with vendors and conducted tests on camera hardware.

Rice University Houston, TX
Advised by Richard Baraniuk Fall 2012 - Spring 2013
Researched compressive sensing for computational imaging. Simulated lensless camera.

Google Mountain View, CA
Hardware Engineer Intern, Advised by Choon Chng Summer 2012
Collected image quality data on webcams. Designed/conducted a personal preference survey. Data used to determine color specs for Chromebook cameras.

Rice University Houston, TX
Advised by Junichiro Kono Spring 2011 - Spring 2012
Studied properties of graphene and carbon nanotubes. Developed a single-shot terahertz spectroscopy system to study materials under high magnetic fields.

University of Michigan, REU Intern Ann Arbor, MI
Advised by Mina Rais-Zadeh Summer 2011
Studied sputtering parameters of Aluminum nitride thin films and effects on properties such as film thickness and crystal structure.

Los Alamos National Laboratory Los Alamos, NM
Advised by Michael Brown Summer 2010
Conducted validation studies comparing the Quick Urban and Industrial Complex algorithm to empirical studies and traditional computation fluid dynamics algorithms.

HONORS AND AWARDS

Rising Stars in EECS Participant Fall 2017
Adobe Fellowship Spring 2017
NDSEG Spring 2013
Chancellor's Fellowship, UC Berkeley (2 year tuition and stipend) Spring 2013
Named Outstanding Junior in EE by Rice Eng. Alumni Association Spring 2012
Barry Goldwater Honorable Mention Spring 2012
Max Roy Scholarship, Rice University (4 year tuition) Spring 2009
National Merit Scholar Spring 2009

TEACHING EXPERIENCE

UC Berkeley Berkeley, CA
CS 294-131: Special Topics in Deep Learning Fall 2017
Responsibilities included organizing speakers, designing the course rubric, and grading

course projects.

UC Berkeley

Berkeley, CA

CS 188: Introduction to Artificial Intelligence

Spring 2015

Responsibilities included teaching section (3 times/week; 10-25 students), holding office hours, and developing and grading tests.

Rice University

Houston, TX

EE 241A: Introduction to Signals and Systems

Fall 2011, Fall 2012

Reviewed key signal processing concepts with a 5-10 students 5+ hours a week.

**SERVICE &
LEADERSHIP**

Area Chair: ACL, NAACL, EMNLP, ICCV

Reviewer: ICCV, ECCV, ACL, EMNLP, ICML, NeurIPS; CVPR Outstanding Reviewer (2018, 2019), EMNLP Best Reviewer (2018)

CVPR Workshop Chair: Workshop for Women in Computer Vision Summer 2016

Berkeley Women in Computer Science and Engineering (WICSE) Fall 2013 - Present

Co-President: Fall 2015-Spring 2016

Social Chair: Fall 2014-Spring 2015