

Lisa Anne Hendricks

www.eecs.berkeley.edu/~lisa_anne
lisa_anne@berkeley.edu

EDUCATION **UC Berkeley** Berkeley, CA
PhD, Electrical Engineering and Computer Science Expected 2019
Advised by Trevor Darrell
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)

INTERESTS Computer Vision, Deep Learning, Language and Vision, Video Understanding

JOURNAL PUBLICATIONS [1] Donahue, Jeff, **Lisa Anne Hendricks**, Marcus Rohrbach, Subhashini Venugopalan, Sergio Guadarrama, Kate Saenko, and Trevor Darrell. “Long-term recurrent convolutional networks for visual recognition and description.” In *IEEE Transactions on Pattern Analysis and Machine Intelligence* (2016).

CONFERENCE PUBLICATIONS [2] **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.

[3] 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.

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

[5] **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.

[6] 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**

[7] **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.

[8] Shetty, Rakshith, Marcus Rohrbach, **Lisa Anne Hendricks**, Mario Fritz, and Bernt Schiele. “Speaking the Same Language: Matching Machine to Human Captions by Adversarial Training.” In *International Conference on Computer Vision (ICCV)*, 2017.

- [9] 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**
- [10] Venugopalan, Subhashini, **Lisa Anne Hendricks**, Raymond Mooney, and Kate Saenko. “Improving LSTM-based Video Description with Linguistic Knowledge from Text.” In *Conference on Empirical Methods in Natural Language Processing (EMNLP), 2016*.
- [11] **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*.
- [12] **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**
- [13] Gao, Yang, **Lisa Anne Hendricks**, Katherine J. Kuchenbecker, and Trevor Darrell. “Deep Learning for Tactile Understanding From Visual and Haptic Data”. In *International Conference on Robotics and Automation (ICRA), 2016*.
- [14] Burka, Alex, Siyao Hu, Stuart Helgeson, Shweta Krishnan, Yang Gao, **Lisa Anne Hendricks**, Trevor Darrell, and Katherine J. Kuchenbecker. “Proton: A visuo-haptic data acquisition system for robotic learning of surface properties.” In *Multisensor Fusion and Integration for Intelligent Systems (MFI), 2016 IEEE International Conference*.
- [15] 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**

**WORKSHOP
PUBLICATIONS**

- [16] **Hendricks, Lisa Anne**, Ronghang Hu, Trevor Darrell, and Zeynep Akata. “Generating Counterfactual Explanations with Natural Language (Extended Abstract).” In *Proceedings of the 2018 ICML Workshop on Human Interpretability, 2018*.
- [17] **Hendricks, Lisa Anne**, Ronghang Hu, Trevor Darrell, and Zeynep Akata. “Grounding Visual Explanations (Extended Abstract).” In *Proceedings of the 2017 NIPS Symposium on Interpretable ML, 2017*. **Spotlight**
- [18] Park, Dong Huk, **Lisa Anne Hendricks**, Zeynep Akata, Anna Rohrbach, Bernt Schiele, Trevor Darrell, and Marcus Rohrbach. “Attentive Explanations: Justifying Decisions and Pointing to the Evidence (Extended Abstract).” In *Proceedings of the 2017 NIPS Symposium on Interpretable ML, 2017*.
- [19] Ramanishka, Vasili, Abir Das, Dong Huk Park, Subhashini Venugopalan, **Lisa Anne Hendricks**, Marcus Rohrbach, and Kate Saenko. “Multimodal Video Description.” In *Proceedings of the 2016 ACM on Multimedia Conference*, pp. 1092-1096. ACM, 2016.
- [20] Burka, Alex, Siyao Hu, Stuart Helgeson, Shweta Krishnan, Yang Gao, **Lisa Anne Hendricks**, Trevor Darrell, and Katherine J. Kuchenbecker. “Design and implementation of a visuo-haptic data acquisition system for robotic learning of surface properties.” *HAPTICS 16 Works in Progress (2016)*: 350-352.

[21] Burka, Alex, Siyao Hu, Shweta Krishnan, Katherine. J. Kuchenbecker, **Lisa Anne Hendricks**, Yang Gao, and Trevor Darrell, "Toward a large-scale visuo-haptic dataset for robotic learning," In *Proceedings of the Workshop on the Future of Datasets in Vision at Computer Vision and Pattern Recognition (CVPR), 2015 IEEE Conference*.

[22] Finn, Chelsea, **Lisa Anne Hendricks**, and Trevor Darrell. "Learning Compact Convolutional Neural Networks with Nested Dropout." In *International Conference on Learning Representation (ICLR) Workshop, 2015*

**ACADEMIC
TALKS**

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

**RESEARCH
AND INDUSTRY
EXPERIENCE**

UC Berkeley Berkeley, CA
Advised by Trevor Darrell Fall 2013- Present

Computer vision research, including projects on activity recognition, image description, haptics and deep learning.

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

Huawei Fellowship

Fall 2016

NDSEG

Spring 2013

Chancellor's Fellowship, UC Berkeley

Spring 2013

Named Outstanding Junior in EE by Rice Eng. Alumni Association

Spring 2012

Barry Goldwater Honorable Mention

Spring 2012

Max Roy Scholarship (4 year full-tuition scholarship to Rice University)

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

Reviewer: CVPR 2017, ICCV 2017, CVPR 2018 (Outstanding Reviewer), ACL 2018, ECCV 2018, EMNLP 2018 (Best Reviewer Award)

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

DREAM: Designing with Rice Engineers Achievement through Mentorship 2012-2013

