

# Kaylee Burns

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*I'm interested in improving visual understanding by leveraging information from other mediums (e.g. from language) and in making machine learning systems fair and transparent.*

## *Education*

### **5<sup>th</sup> Year M.S. EECS, University of California, Berkeley**

May 2019

Advised by Professor Trevor Darrell.

### **B.A. Computer Science and Cognitive Science, University of California, Berkeley**

May 2018

GPA 3.9 out of 4.0. Coursework in artificial intelligence, linear algebra, probability, algorithms, optimization, operating systems, linguistics, neuroscience, etc.

## *Experience*

### **Student Researcher, UC Berkeley**

Fall 2017-Present

Advised by Professor Trevor Darrell. Research in domain adaptation and shortcomings in vision and language.

Advised by Professor Tom Griffiths. Research on reasoning capacity of memory networks.

### **Software Engineering Intern, IBM**

Summer 2017

Designed and developed a forecasting and recommendation platform for IBM API connect. Pitched to a panel of executives each week and presented work at a company-wide expo at headquarters in Armonk.

### **Student Researcher, Knight Cognitive Neuroscience Lab**

Fall 2015-Spring 2016

Research on the representation in the human auditory cortex.

## *Involvement*

### **Teaching Assistant, University of California, Berkeley**

EE 126, Probability and Random Processes. Spring 2018.

CS 70, Discrete Math and Probability Theory. Fall 2017.

CS 61B, Data Structures and Algorithms. Spring 2017, Fall 2016.

### **External Vice President,**

### **Cognitive Science Student Association at UC Berkeley**

Fall 2017, Spring 2018

Organized the California Cognitive Science Conference, which is an annual event attended by several hundred guests and 7 acclaimed speakers from a breadth of disciplines.

### *Awards*

**Jim and Donna Gray Award** Spring 2017, Awarded by UC Berkeley EECS

**Helen Tomasini Scholarship** Spring 2017, Awarded by UC Berkeley.

**Guerra Kung Scholarship** Spring 2017, Awarded by UC Berkeley

### *Publications*

**Kaylee Burns**, Aida Nematzadeh, Kaylee Burns, Erin Grant, Alison Gopnik, and Tom Griffiths. “Exploiting Attention to Reveal Shortcomings in Memory Models.” In *Analyzing and Interpreting Neural Networks for NLP Workshop at 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.

Nematzadeh, A., **Burns, K.**, Grant, E., Gopnik, A., & Griffiths, T.L. (2018). “Evaluating theory of mind in question answering.” In *Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, Brussels, October 2018.

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