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

5th 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 and Tom Griffiths. Diagnosing Failures in Question Answering Tasks with Attention. 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., & 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.