

DAVE EPSTEIN
dave.epstein@berkeley.edu

Education

University of California, Berkeley, Ph.D. in Computer Science
Advisor: Prof. Alexei Efros

Berkeley, CA
Aug 2020 -

Columbia University, B.S. in Computer Science
Advisor: Prof. Carl Vondrick, GPA: 4.11, summa cum laude

New York, NY
Sep 2016 - May 2020

Research Interests

I work on teaching machines a high-level creative understanding of the dynamic real world, which I believe requires learning from video without manual supervision. I am also interested in language, machine learning, image synthesis, and interaction as they relate to this.

Publications

D. Epstein, J. Wu, C. Schmid, C. Sun. "Learning Temporal Dynamics from Cycles in Narrated Video." Arxiv. In submission.

D. Surís, **D. Epstein**, C. Vondrick. "Globetrotter: Unsupervised Multilingual Translation from Visual Alignment." Arxiv. In submission.

D. Epstein, C. Vondrick. "Learning Goals from Failure." Arxiv. In submission.

D. Surís*, **D. Epstein***, H. Ji, S.F. Chang, C. Vondrick. "Learning to Learn Words from Visual Scenes." ECCV 2020.

D. Epstein, B. Chen, C. Vondrick. "Oops! Predicting Unintentional Action in Video." CVPR 2020.

D. Epstein*, Y. Shi*, E. Wu, C. Vondrick. "What's missing from self-supervised representation learning?"

D. She, K. Pei, **D. Epstein**, J. Yang, B. Ray, S. Jana. "NEUZZ: efficient fuzzing with neural program learning." S&P Oakland 2019.

Experience

Berkeley Artificial Intelligence Research, advised by Prof. Alexei Efros
Research Assistant

Aug 2020 -
Berkeley, CA

Google Research, advised by Prof. Chen Sun, Prof. Jiajun Wu, and Dr. Cordelia Schmid
Research Intern

May 2020 - Dec 2020
Mountain View, CA

Computer Vision Lab at Columbia University, advised by Prof. Carl Vondrick
Undergraduate Research Assistant

Sep 2018 - May 2020
New York, NY

Intel, Performance Projection Group
Software Architecture Intern

May 2018 - Aug 2018
Santa Clara, CA

Security Lab at Columbia University, advised by Prof. Suman Jana
Undergraduate Research Assistant

Oct 2017 - May 2018
New York, NY

Awards and Honors

Theodore R. Bashkow Award , Columbia University Department of Computer Science	May 2020
Academic Excellence Award , Columbia University Department of Computer Science	May 2020
CRA Outstanding Undergraduate Researcher , Honorable Mention	Dec 2019
Junior Tau Beta Pi	Mar 2019

Teaching Experience

Columbia University Department of Computer Science Head Teaching Assistant	Sep 2017 - Aug 2019 New York, NY
Data Structures and Algorithms , Fall 2017, Spring 2018, Fall 2018, Spring 2019, Summer 2019	
Advanced Computer Vision , Spring 2019	

Professional Service

Reviewer, CVPR 2020, NeurIPS 2020, CVPR 2021

Presentations

Invited talk , UC Berkeley, Google "Toward bridging the child-machine gap."	Jul 2020
Short presentation , Minds vs. Machines Workshop at CVPR 2020 "Oops! Predicting unintentional action in video."	Jun 2020
Oral presentation , Minds vs. Machines Workshop at CVPR 2020 "Learning to learn words from visual scenes."	Jun 2020
Invited talk , Columbia High School Academic Program for Engineers "AI safety and security in machine learning."	Nov 2018
Poster presentation , MIT Undergraduate Research Technology Conference "Automatically detecting software vulnerabilities with machine learning."	Oct 2018

Other Interests

Industrial and interior design, Romance languages, cooking, cocktail mixing, ice cream making, magical realism.