

EXPERIENCE

Co-founder

Unnamed Venture Studio

July 2021 - present

We develop AI-powered products to improve human life.

Organizer and Instructor

Full Stack Deep Learning

August 2018 - present

Developed materials for a weekend bootcamp program for software developers familiar with deep learning to get first-hand experience with the best practices of all components of a DL project. Also taught the same materials as a UW Professional Master's Program course.

Head of AI for STEM

Turnitin, Oakland, CA

October 2018 - July 2021

Gradescope was acquired as a standalone product by Turnitin, a leading educational technology company that has previously focused on assessment of writing.

Co-founder

Gradescope, Berkeley, CA

September 2014 - October 2018

Gradescope enables instructors to grade paper-based exams, online homework, and programming projects on one platform, with AI assistance.

Graduate Student Researcher

UC Berkeley

September 2009 - September 2014

Thesis work on novel application of reinforcement learning techniques to the task of object recognition. Contributed to the development of Caffe, a popular deep learning frameworks. Developed a 3D perception dataset and method, and a novel hierarchical generative model.

Research Intern

Creative Tech. Lab at Adobe, San Francisco, CA

Summer 2013

Developed a system for recognizing the style of photographs and paintings.

Graduate Student Instructor

University of California, Berkeley

Fall 2012, Fall 2013

Led section and composed exams for the Introduction to AI course.

Research and Development Intern

Artsy, New York City, NY

Summer 2012

Prototyped a system for the recognition of visual properties of artwork.

Undergraduate Researcher

University of Washington

October 2007 - June 2009

Worked on augmented reality on the iPhone and human-computer interaction via webcam.

Software Development Intern

Zillow.com, Seattle, WA

Summer 2008

Maintained, improved, and added features for a high-traffic consumer website.

Teaching Assistant

University of Washington

Winter 2007, Spring 2007

Led section and graded for the introductory programming courses.

Research Apprentice

Friday Harbor Laboratories (UW)

Spring 2006

Explored the distribution of neuropeptides in a sea slug central nervous system.

EDUCATION

University of California, Berkeley · August 2009 - December 2014

Ph.D. Computer Science

Thesis Advisor: Trevor Darrell

University of Washington, Seattle · September 2005 - June 2009

B.S. Computer Science & B.A. Psychology

Thesis Advisor: Steven Seitz

PUBLICATIONS

Full Page Handwriting Recognition via Image to Sequence Extraction at *ICDAR 2021*

Sumeet Singh, Sergey Karayev

Analysis of Grading Times of Short Answer Questions at *L@S 2020*

Michael Yen, Sergey Karayev, Eric Wang

Grades are not Normal: Improving Exam Score Models at *EDM 2019*

Noah Arthurs, Ben Stenhaus, Chris Piech, Sergey Karayev

How Do Professors Format Exams? An Analysis of Question Variety at Scale at *L@S 2018*

Paul Laskowski, Sergey Karayev, Marti Hearst

Gradescope: A Fast, Flexible, and Fair System for Scalable Assessment at *L@S 2017*

Arjun Singh, Sergey Karayev, Kevin Gutowski, Pieter Abbeel

Anytime Recognition of Objects and Scenes at *CVPR 2014* (oral)

Sergey Karayev, Mario Fritz, Trevor Darrell

Recognizing Image Style at *BMVC 2014*

Sergey Karayev, Matthew Trentacoste, Helen Han, Aseem Agarwala, Trevor Darrell, Aaron Hertzmann, Holger Winnemöller

Caffe: Convolutional Architecture for Fast Feature Embedding at *ACM MM 2014*

Yangqing Jia, Evan Shelhamer, Jeff Donahue, Sergey Karayev, Jonathan Long, Ross Girshick, Sergio Guadarrama, Trevor Darrell

Dynamic Feature Selection for Classification on a Budget at *ICML-W 2013*

Sergey Karayev, Mario Fritz, Trevor Darrell

A Category-Level 3-D Object Dataset: Putting the Kinect to Work at *ICCV-W 2013*

Allison Janoch, Sergey Karayev, Yangqing Jia, Jonathan T. Barron, Mario Fritz, Kate Saenko, Trevor Darrell

Timely Object Recognition at *NIPS 2012*

Sergey Karayev, Tobias Bamgartner, Mario Fritz, Trevor Darrell

3-D Object Detection Using Category and Instance-level Appearance Models at *IROS 2011*

Kate Saenko, Sergey Karayev, Yangqing Jia, Alex Shyr, Allison Janoch, Jon Long, Mario Fritz, Trevor Darrell

A Probabilistic Model for Recursive Factorized Image Features at *CVPR 2011*

Sergey Karayev, Mario Fritz, Sanja Fidler, Trevor Darrell

An Additive Latent Feature Model for Transparent Object Recognition at *NIPS 2009*

Mario Fritz, Michael Black, Gary Bradski, Sergey Karayev, Trevor Darrell

AWARDS

UW Engineering Early Career Award 2019

Mark Everingham Prize (for work on the Caffe open source software), 2017

National Defense Science and Engineering Graduate Fellowship, 2009-2012

Mary Gates Research Scholarship, 2008

Microsoft Scholarship, 2008

Honors Bordeaux Scholarship, 2008

Mary Gates Honors Scholarship, 2005-2007

Robert C. Byrd Honors Scholarship, 2005-2009

National Merit Scholarship, 2005-2009

Undergraduate Academic Excellence Scholarship , 2005.