http://sergeykarayev.com · sergeykarayev@gmail.com · Updated 7 January 2015

EDUCATION University of California, Berkeley · August 2009 - December 2014

Ph.D. Computer Science *Thesis Advisor*: Trevor Darrel

Courses: Statistical Learning, Computer Vision, Natural Language Processing, Computational

Neuroscience, Reinforcement Learning, Algorithms, Systems

University of Washington, Seattle · September 2005 - June 2009

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

Thesis Advisor: Steven Seitz

EXPERIENCE Co-founder

Gradescope, Berkeley, CA

September 2014 - present

With fellow PhD Arjun Singh and Prof. Pieter Abbeel. Our product allows paper-based assignments to be assessed online, enabling data-driven feedback to both students and instructors.

Graduate Student Researcher

UC Berkeley

September 2009 - September 2014

With Prof. Trevor Darrell. Developed generative hierarchical models for local features for object detection and recognition; gathered 3-D category-level dataset and implemented method for object detection; Implemented novel method for Anytime multi-class object recognition.

Research Intern

Creative Tech. Lab at Adobe, San Francisco, CA

Summer 2013

Gathered data and developed 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 CS 188: Artificial Intelligence taught by Dan Klein and Pieter Abbeel, offered to hundreds of Berkeley undergraduates as well as to thousands online.

Research and Development Intern

Artsy, New York City, NY

Summer 2012

Built tools to clean and annotate existing data on the visual properties of artworks and prototyped a system for their recognition.

Undergraduate Researcher

University of Washington

October 2007 - June 2009

With Profs. Steve Seitz, Luis Ceze. Augmented reality on a mobile device; novel human-computer interaction through a webcam; identification of mutex critical sections.

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 course, CSE 142.

Research Apprentice

Friday Harbor Laboratories (UW)

Spring 2006

With Profs. Shaun Cain, James Murray. Explored the distribution of neuropeptides in the central nervous system of a sea slug.

PUBLICATIONS

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, <u>Sergey Karayev</u>, 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, <u>Sergey Karayev</u>, 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

SKILLS

Scientific and data: Python, Matlab, C/C++.

Web development: Ruby, JavaScript.

Most code is open-source at http://github.com/sergeyk.

Fluent in Russian.

SERVICE

CSGSA Officer: Industry Liaison for the Berkeley CS Graduate Association. May 2012 - 2014

Graduate Assembly Delegate: represented the department. 2010

AWARDS

National Defense Science and Eng. Grad. Fellowship (full tuition and stipend), 2009-2012

Mary Gates Research Scholarship (undergraduate research stipend), 2008

Microsoft Scholarship (CS department award), 2008

Honors Bordeaux Scholarship (full tuition for one year), 2008

Mary Gates Honors Scholarship (full tuition for three years), 2005-2007 Robert C. Byrd Honors Scholarship (Washington State award), 2005-2009 National Merit Scholarship (sponsored by the Boeing Company), 2005-2009

Undergraduate Academic Excellence Scholarship (UW award), 2005.