Sergey Karayev

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Objective

To make useful things.

Education

University of California, Berkeley · *August 2009 - December 2014*
Ph.D. Computer Science
Thesis Advisor: Trevor Darrel
Courses: Stat. Learning, Computer Vision, Natural Language Processing, Comp. Neuroscience, Reinforcement Learning, Algorithms, Systems, Marketing Emerging Tech

University of Washington, Seattle · *September 2005 - June 2009*
B.S. Computer Science & B.A. Psychology
Thesis Advisor: Steven Seitz

Work Experience

Research Internship
Creative Tech. Lab at Adobe, San Francisco, CA *June 2013 - September 2013*
Gathered data and developed a system for recognizing the style of photographs and paintings.

Research and Development Internship
Artsy, New York City, NY *June 2012 - September 2012*
Built tools to clean and annotate existing data on the visual properties of artworks and prototyped a system for their recognition.

Software Development Internship
Zillow.com, Seattle, WA *June 2008 - September 2008*
Maintained, improved, and added features to a high-traffic consumer website.

First-author 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

Dynamic Feature Selection for Classification on a Budget at *ICML-W 2013*
Sergey Karayev, Mario Fritz, Trevor Darrell

Timely Object Recognition at *NIPS 2012*
Sergey Karayev, Tobias Bamgartner, Mario Fritz, Trevor Darrell

A Probabilistic Model for Recursive Factorized Image Features at *CVPR 2011*
Sergey Karayev, Mario Fritz, Sanja Fidler, Trevor Darrell

Other Peer-Reviewed Publications

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

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

Practical 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

An Additive Latent Feature Model for Transparent Object Recognition at *NIPS 2009*
Mario Fritz, Michael Black, Gary Bradski, Sergey Karayev, Trevor Darrell

Research Experience

Graduate Student Researcher
UC Berkeley *September 2009 - Present*
Worked with Profs. Trevor Darrell, Pieter Abbeel. Developed generative hierarchical models for local features for object detection and recognition; Constructed novel 3-D category-level dataset and implemented method for object detection; Constructed novel dataset and implemented apprenticeship learning for human visual attention; Implemented novel method for test-time efficiency for Anytime multi-class object recognition.

Undergraduate Researcher
University of Washington *October 2007 - June 2009*
Worked with Profs. Steve Seitz, Luis Ceze. Augmented reality on a mobile device; novel human-computer interaction through a webcam; identification of mutex critical sections.

Research Apprentice
Friday Harbor Laboratories (UW) *April 2006 - June 2006*
Worked with Profs. Shaun Cain, James Murray. Investigated the distribution of neuropeptides in the central nervous system of a sea slug.

Teaching Experience

Graduate Student Instructor
University of California, Berkeley *Fall 2012, Fall 2013*
Taught section and composed exams for CS 188: Artificial Intelligence taught by Dan Klein and Pieter Abbeel, offered to four hundred Berkeley undergraduates as well as online to thousands.

Teaching Assistant: Intro to Programming
University of Washington *Winter, Spring 2007*
Taught section in the introductory programming course, CSE 142.

Skills

Programming: Python, Matlab, C++ for research. Python, Ruby, JavaScript for web dev. (Most code is open-source at http://github.com/sergeyk.)
Human: Fluent Russian.

Service

CSGSA Officer: Industry Liaison for the Berkeley CS Graduate Association. *May 2012 - 2014*
Graduate Assembly Delegate: represented the department. *2010*

Honors and 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
Phi Beta Kappa, 2007-present
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.