

Philipp Krähenbühl

EDUCATION

- 2009–2014 **PhD, Computer Science**, *Stanford University*, Stanford CA.
- 2007–2008 **Student Exchange, Computer Science**, *University of Washington*, Seattle WA.
- 2005–2009 **BSc, Computer Science**, *ETH Zurich*, Zurich, Switzerland.

RESEARCH AND INDUSTRY EXPERIENCE

- 2016– **Assistant Professor, Zeitlin Fellow**, *UT Austin*, Department of Computer Science.
Computer Vision and Machine Learning
- 2014–2016 **Postdoctoral Researcher**, *UC Berkeley*, with Alexei Efros and Jitendra Malik.
Computer Vision and Machine Learning
- 2009–2014 **Research Assistant**, *Stanford University*, with Vladlen Koltun.
Focus on Computer Vision and Machine Learning
- 2012,2013 **Research Internship**, *Adobe Creative Technologies Lab*.
- 2011 **Research Internship**, *Disney Research Zurich*.
- 2008 **Research Assistant**, *University of Washington*, with Zoran Popovic.
- 2006–2009 **Research Assistant**, *ETH Zurich*, with Markus Gross, Gaston Gonnet and Bertrand Meyer.

TEACHING EXPERIENCE

- Fall 2016 **Instructor**, *CS395T - Deep learning seminar*, UT Austin.
- Spring 2015 **Guest Lecture**, *CS231B: The Cutting Edge of Computer Vision*, Stanford University.

SELECT PUBLICATIONS

Peer-Reviewed Journal and Conference Publications

- [1] Chao-Yuan Wu, Nayan Singh, and Philipp Krähenbühl. "Video Compression through Image Interpolation". In: (ECCV 2018). 2018.
- [2] Haoshuo Huang, Qixing Huang, and Philipp Krähenbühl. "Domain transfer through deep activation matching". In: (ECCV 2018). 2018.
- [3] Chao-Yuan Wu, Manzil Zaheer, Hexiang Hu, R. Manmatha, Alexander J. Smola, and Philipp Krähenbühl. "Compressed Video Action Recognition". In: (CVPR 2018). 2018.
- [4] Philipp Krähenbühl. "Free Supervision from Video Games". In: (CVPR 2018). 2018.
- [5] Chao-Yuan Wu, R. Manmatha, Alexander J. Smola, and Philipp Krähenbühl. "Sampling Matters in Deep Embedding Learning". In: (ICCV 2017). 2017.
- [6] Jeff Donahue, Philipp Krähenbühl, and Trevor Darrell. "Adversarial Feature Learning". In: (ICLR 2017). 2017.

- [7] Jun-Yan Zhu, Philipp Krähenbühl, Eli Shechtman, and Alexei A. Efros. “Generative Visual Manipulation on the Natural Image Manifold”. In: (ECCV 2016). 2016.
- [8] Deepak Pathak, Philipp Krähenbühl, Jeff Donahue, Trevor Darrell, and Alyosha Efros. “Context Encoders: Feature Learning by Inpainting”. In: (CVPR 2016). 2016.
- [9] Tinghui Zhou, Philipp Krähenbühl, Mathieu Aubry, Qixing Huang, and Alyosha Efros. “Learning Dense Correspondence via 3D-guided Cycle Consistency”. In: (CVPR 2016). 2016.
- [10] Philipp Krähenbühl, Carl Doersch, Jeff Donahue, and Trevor Darrell. “Data-dependent initializations of convolutional neural networks”. In: (ICLR 2016). 2016.
- [11] Jun-Yan Zhu, Philipp Krähenbühl, Eli Shechtman, and Alyosha Efros. “Learning a Discriminative Model for the Perception of Realism in Composite Images”. In: (ICCV 2015). 2015.
- [12] Tinghui Zhou, Philipp Krähenbühl, and Alyosha Efros. “Learning Data-driven Reflectance Priors for Intrinsic Image Decomposition”. In: (ICCV 2015). 2015.
- [13] Deepak Pathak, Philipp Krähenbühl, and Trevor Darrell. “Constrained Convolutional Neural Networks for Weakly Supervised Segmentation”. In: (ICCV 2015). 2015.
- [14] Philipp Krähenbühl and Vladlen Koltun. “Learning to propose objects”. In: (CVPR 2015). 2015.
- [15] Philipp Krähenbühl and Vladlen Koltun. “Geodesic Object Proposals”. In: (ECCV 2014 (oral)). 2014.
- [16] Philipp Krähenbühl. “Dense Random Fields”. In: (Phd Thesis). 2014.
- [17] Philipp Krähenbühl and Vladlen Koltun. “Parameter Learning and Convergent Inference for Dense Random Fields”. In: (ICML 2013). 2013.
- [18] Philipp Krähenbühl and Vladlen Koltun. “Efficient Nonlocal regularization for Optical Flow”. In: (ECCV 2012). 2012.
- [19] Federico Perazzi, Philipp Krähenbühl, Yael Pritch, and Alexander Hornung. “Saliency Filters: Contrast Based Filtering for Salient Region Detection”. In: (CVPR 2012). 2012.
- [20] Philipp Krähenbühl and Vladlen Koltun. “Efficient Inference in Fully Connected CRFs with Gaussian Edge Potentials”. In: (NIPS 2011 (best student paper)). 2011.
- [21] Sergey Levine, Philipp Krähenbühl, Sebastian Thrun, and Vladlen Koltun. “Gesture Controllers”. In: (SIGGRAPH 2010). 2010.
- [22] Philipp Krähenbühl, Manuel Lang, Alexander Hornung, and Markus Gross. “Retargeting of Streaming Video”. In: (SIGGRAPH Asia 2009). 2009.
- [23] Philipp Krähenbühl. “Art Directable Retargeting for Streaming Video”. In: (Bachelor Thesis, ETH Zurich, February 2009). 2009.

Complete list available at www.philkr.net.

SERVICE AND AFFILIATIONS

Area Chair International Conference on Computer Vision (ICCV): 2017
Computer Vision and Pattern Recognition (CVPR): 2018
European Conference on Computer Vision (ECCV): 2016, 2018
Speaker Tutorial on Higher Order Models and Inference Approaches, ECCV 2014
Coach Swiss Olympiad in Informatics, 2005-2009

COLLABORATORS & OTHER AFFILIATIONS

Graduate Advisor Koltun, Vladlen; Stanford
Postdoctoral Sponsors Darrell, Trevor; UC-Berkeley
Efros, Alexei; UC-Berkeley
Malik, Jitendra; UC-Berkeley

HONORS AND AWARDS

2011 **NIPS Outstanding Student Paper Award.**
Highest award at the conference, given to 3 out of 1400 submissions.
2010 **Member of Stanfords Team at ACM ICPC World Finals.**
2005 **Silver Medal at International Olympiad in Informatics.**
2004,2005 **First Place at Swiss Olympiad in Informatics.**
2005 **Silver Medal at Swiss Mathematics Olympiad.**