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EDUCATION

Stanford University

M.S., Electrical Engineering, June, 1984.
Ph.D., Electrical Engineering, December, 1989.
Dissertation: *Object Classes and Image Contours in Model-Based Vision*.
Advisor: Thomas O. Binford.

Princeton University

B.S.E., Electrical Engineering and Computer Science, June, 1983.
Summa cum laude.

AWARDS AND HONORS

Fellow of the IEEE, 2014.
Connect Most Innovative New Product Award for TAAZ.COM, 2008.
Marr Prize Honorable Mention (ICCV), 2007.
Tech Coast Angels Quick Pitch, Best Presentation, 2007.
Paper of the Year Award, Journal of Structural Biology, 2003.
Willett Faculty Scholar Award, 2002.
Best Paper Award, European Conference on Computer Vision, 1998.
Best Paper Award, IEEE Conference on Computer Vision and Pattern Recognition, 1996.
Elected Golden Core Member of IEEE Computer Society, 1996.
Semi-finalist for Best Paper Award, IEEE Conference on Robotics and Automation, 1994.
National Science Foundation Young Investigator Award (NYI), 1992.
Hertz Foundation Graduate Fellowship.
Charles Ira Young Award for Electrical Engineering Research at Princeton.
Member of Phi Beta Kappa and Tau Beta Pi.

EXPERIENCE

Full Professor, University of California, San Diego, Computer Science & Engineering, 2002–present.
Manager Machine Learning Team, Dropbox, Sep. 2014–Sep. 2018 (during UCSD leave of absence)
Founder/CEO/CSO/Board Member, Sight Commerce, Inc., 2007–present.
Partner, Kriegman-Belhumeur Vision Technologies, LLC 2004–2014 (Sold to Dropbox).
Associate Professor, University of Illinois, Urbana-Champaign, Computer Science Department, Beckman Institute, August 1998 – August, 2002.
Associate Professor, Yale University, Departments of Electrical Engineering and Computer Science, Center for Systems Science, Center for Computational Vision and Control, July 1994 – August 1998.
Visiting Professor, California Institute of Technology, Summer 1993, Spring 1994.
Assistant Professor, Yale University, Departments of Electrical Engineering and Computer Science, Center for Systems Science, January 1990–June 1994.
Research Assistant, Stanford University, Robotics Laboratory, 1985–1989.
Visiting Scientist, MIT Artificial Intelligence Laboratory, Summer 1984.
Technical Associate, Bell Laboratories, Digital Signal Processing Group of the Specialized Processor Hardware Department, Summers 1981, 1982.

PROFESSIONAL ACTIVITIES

- Co-chair: Workshop on Automated Analysis of Marine Video for Environmental Monitoring at CVPR 2018.
- Guest Editor: Special issue of "Methods in Oceanography" on "Computer Vision in Oceanography", April/July 2016 issues.
- Co-organizer : 2nd Workshop on Automated Analysis of Video Data for Wildlife Surveillance, Lake Placid, March 10, 2016.
- Roundtable member: Computing Community Consortium Industry Roundtable, Computing Research Association, July 24, 2015.
- Co-organizer : 1st Workshop on Automated Analysis of Video Data for Wildlife Surveillance, Hawaii, January 9, 2015
- Organizing Committee, National Academies (NRC) Workshop on Automating Image and Video Analysis for Fisheries Stock Assessment, 2014.
- NOAA NMFS Automated Image Analysis Strategic Initiative, committee member, 2013–present.
- DARPA ISAT Technology Affordances for Civilian Transparency (TACT), 2013
- Steering Committee: IEEE PAMI Technical Committee, 2009-2012
- Ad Hoc Committee of IEEE PAMI Technical Committee to Examine relations between IEEE Computer Society and CVPR/ICCV 2011, 2015
- Guest Editor: IEEE Transactions on Pattern Analysis and Machine Intelligence, Special Issue on Real World Face Recognition, 2011.
- Advisory Board: IEEE Transactions on Pattern Analysis and Machine Intelligence, 2009-present.
- Search Committee: IEEE Computer Society Search for Editor-in-Chief of IEEE TPAMI, 2012
- Editor-in-Chief: IEEE Transactions on Pattern Analysis and Machine Intelligence, 2005–2008.
- Associate Editor-in-Chief: IEEE Transactions on Pattern Analysis and Machine Intelligence, 2001 – 2004
- Associate Editor: IEEE Transactions on Robotics and Automation, 2000 – 2003.
- Associate Editor: IEEE Transactions on Pattern Analysis and Machine Intelligence, 1997 – 2000.
- Guest Editor: Computer Vision and Image Understanding, Special Issue on Face Recognition, 2003.
- General Chair: IEEE Conference on Computer Vision & Pattern Recognition, 2005.
- Co-chair: IEEE Workshop on Integration of Appearance & Geometric Methods in Object Recognition, 1999.
- Co-chair: Block Island Workshop on Vision and Control, 1997.
- Program Chair: IEEE Conference on Computer Vision and Pattern Recognition, 2000.
- Program Area Chair: Asian Conference on Computer Vision, 2014, 2016
- Program Area Chair: International Conference on Computer Vision, 2009, 2011, 2013.
- Program Area Chair: IEEE Conference on Computer Vision and Pattern Recognition, 1999, 2001, 2003, 2010, 2019.
- Program Area Chair: European Conference on Computer Vision, 2012.

Program Committee: ICPR Workshop on Computer Vision for Analysis of Underwater Imagery, 2014.
 ICCV Workshop on Underwater Vision, 2013.
 IEEE Workshop on Large Scale Visual Commerce, 2013.
 IEEE Color and Photometry in Computer Vision, 2011.
 IEEE International Workshop on Analysis and Modeling of Faces and Gestures, 2005, 2007
 European Conference on Computer Vision, 2004.
 Computer Vision & Pattern Recognition for Human Computer Interaction, 2003,2006
 International Conference on Computer Vision (ICCV) 1995, 1999, 2001, 2003, 2005, 2007.
 Workshop on Photometric Analysis for Computer Vision (PACV), 2007
 International Conference on Pattern Recognition (ICPR) 2002, 2004
 IMA Conference on the Mathematics of Surfaces, 2000, 2003.
 IEEE Conference on Face and Gesture Recognition (FG) 2002, 2012.
 IEEE Int. Workshop on Analysis and Modeling of Faces & Gestures, 2005
 International Conference Robotics and Automation (ICRA) 2001.
 IEEE Workshop on Identifying Objects Across Variations in
 Lighting: Psychophysics & Computation, 2001.
 IEEE Workshop on Models versus Exemplars in Computer Vision, 2001.
 Workshop on the Algorithmic Foundations of Robotics (WAFR) 2000.
 IEEE Conf. on Computer Vision and Pattern Recognition (CVPR) 1997, 1998,2006, 2007
 American Association for Artificial Intelligence (AAAI) 1996.
 Intelligent Robots and Systems Conf. (IROS), 1994.

IEEE PAMI Technical Committee Young Researcher Award Committee, 2014, 2015

Awards Committee: IEEE Conference on Computer Vision & Pattern Recognition, 2004.

DARPA ISAT Study on Surveillance, 2007.

Air Force Computer Vision Futures Study, 2007.

National Science Foundation Robotics Council: Member 2000–2002.

NSF Grant Review Panels – Eleven panels including
 Small Business Innovation Research (SBIR).
 Grant Review.
 Research Initiation Awards (RIA).
 CAREER.
 ITR
 Research Experience for Undergraduates (REU).

National Institutes of Health, NIGMS Special Emphasis Panel, 2002.

Reviewer: Algorithmica, ACM Transactions on Graphics, Artificial Intelligence Journal, ASME Journal of Engineering for Industry, SIGGRAPH, SIGGRAPH ASIA, IEEE/ASME Transactions on Mechatronics, Computer Vision, Graphics and Image Processing/ CVIU, Discrete and Computational Geometry, IEE Proceedings – Vision, Image and Signal Processing IEEE Computer Magazine, IEEE Control Systems Magazine, IEEE Signal Processing Letters, IEEE Trans. Image Processing, IEEE Trans. on Robotics and Automation, IEEE Trans. on Pattern Analysis and Machine Intelligence, IEEE Trans. on Systems, Man, and Cybernetics, Image and Vision Computing, International Journal of Computer Vision, Int. Journal of Computational Geometry and Applications, International Journal of Robotics Research, International Symposium on Wearable Computers (ISWC), Journal of Mathematical Imaging and Vision, Journal of the Optical Society of America - A, Journal of Structural Biology, Pattern Recognition Letters, Vision Research, IEEE Conf. on Robotics and Automation, IEEE Conf. on Computer Vision and Pattern Recognition, IEEE Intelligent Vehicle Symposium, IEEE Workshop on Visual Motion, International Conference on Computer Vision, International Joint Conf. on Artificial Intelligence, International Joint Conf. on Biometrics, Army Research Office, Brazilian Government (FAPESP), Ecole Polytechnique Federale De Lausanne, Israel Science Foundation, National Science Foundation, National Sciences and Engineering Research Council of Canada, United States-Israel Binational Science Foundation, UK Economic & Social Research Council.

GRANTS

1. **Development and integration of CoralNet Automated Image Annotation Tool for NOAA-CREP's benthic imagery**, D. Kriegman, NOAA, 2015-present.
2. **Toward Perceptually Realistic Relighting for Augmented Reality**, D. Kriegman, Qualcomm, gift, July 2015.
3. **The Next Generation of CoralNet: Improving Automated Methods Benthic Image Analysis and Optimizing for NMFS Benthic Imagery**, D. Kriegman, NOAA, 2014.
4. **An Ultra-high Spatial and Temporal Resolution Underwater Camera System for Observing Microbial Behavior In Situ**, J. Jaffe, P. Franks, D. Kriegman, Keck Foundation, 2012.
5. **Computer Vision Coral Ecology: Cyber-Enabled Image Classification for Rapid, Large Scale, Automated Monitoring of Climate Change Impacts on Coral Reefs**, B. Gregory Mitchell, David J. Kriegman, Serge J. Belongie, National Science Foundation, 2009.
6. **Remote Multi-Modal Biometrics for Maritime Domain**, ONR MURI, UCSD Subaward D. Kriegman, S. Belongie, 2008.
7. **FaceFX: Easy, Effective, Online Photo Enhancement**, vonLiebig Center for Entrepreneurism and Technology Advancement, 2007.
8. **3-D Human Body Tracking from Video**, D. Kriegman, Honda Research Institute.
9. **Software for Processing Human Faces in Images and Videos**, vonLiebig Center for Entrepreneurism and Technology Advancement, 2006.
10. **IGERT: Vision and Learning in Humans and Machines**, G. Cottrell, G. Boynton, V. de Sa, K. Dobkins, D. Kriegman, NSF, 10/03-9/08.
11. **FWGrid: A Research Infrastructure with Fast Wireless, Wired, Compute, and Data Infrastructure for Next Generation Systems and Applications**, A. Chien, D. Kriegman, J. Pasquale, S. Savage, NSF Infrastructure Grant, 9/03-8/08.
12. **Modeling, Tracking and Recognizing Faces in Video Sequences**, D. Kriegman, Honda Research Institute and U.C. MICRO Program/21/03-12/31/04, \$102,000.
13. **Complex Reflectance, Texture and Shape: Methods and Representations for Object Modelling**, P. Belhumeur, D. Kriegman, NSF, 7/1/03-6/30/06.
14. **Instrumentation for Empirical Studies in the Modeling of Visual Appearance**, P. Belhumeur, D. Kriegman, NSF equipment, 9/2002, 3 yrs..
15. **NSF-CONACyT: Collaborative Research on Sensor-Based Robotics**, S. Hutchinson, D. Kriegman, NSF, 3/15/02-2/28/05.
16. **Lighting Priors and Face Recognition**, D. Kriegman, Honda Research, 5/2001.
17. **Active Information Spaces Based on Ubiquitous Computing**, R. Campbell, D. Kriegman, K. Nahrstedt, D. Reed, R. Kravitz, NSF ITR, 9/2000-8/2005.
18. **Multimodal Human Computer Interaction: Toward a Proactive Computer**, T. Huang, D. Brown, D. Kriegman, G. McConkie, D. Roth, NSF ITR, 9/2000-8/2005.
19. **Complex Interactions with the Visual World: Capturing, Understanding, and Predicting Appearance**, subcontract from Yale under NSF ITR grant, 9/2000-8/2002.
20. **An Integrated System for Molecular Microscopy**, B. Carragher, C. Potter, R. Milligan, D. Kriegman, Z.P. Liang, NIH, 6/00-5/04.
21. **New Shape & Reflectance Models for Vision and Image-based Rendering**, D. Kriegman, NSF, 10/2000-6/2003.

22. **An Intelligent Microscope for Transmission Electron Microscopy**, C. Potter, B. Carragher, D. Kriegman, NSF, 10/1/99-9/30/02.
23. **Environment-Independent Perception and Navigation for Tactical Mobile Robots: A Dik-tiometric Approach**, DARPA, PI with G. Hager, D. McDermott, 2 yrs.
24. **Visual Tracking as a Feedback System**, Army Research Office, 3 yrs., Co-PI with G. Hager.
25. **Domain Independent Vision-Based Navigation**, NSF, PI with G. Hager, 1997, 3 yrs..
26. **Next Generation Vision-Based Control System (DURIP)**, Army Research Office, Co-PI with A.S. Morse, G. Hager.
27. **Computational Approaches to Shape Representation and Recognition in Humans and Machines**, Office of Naval Research, PI with M. Tarr (Brown), July 1, 1995, 1 yr.
28. **Modelling and Recognition of Arbitrary Curved Objects from Image Contours**, National Science Foundation, Co-PI with J. Ponce, (U. Illinois), 1993, 3 yrs.
29. **Computational Approaches to Human Shape Representation**, Office of Naval Research, Co-PI with M. Tarr, 1993, 2 yrs.
30. **NSF Young Investigator Award**, National Science Foundation, 1992–1998.
31. **Practical Algebraic Techniques for Robotics and Computer Vision**, National Science Foundation, Co-PI with J. Ponce and S. Hutchinson (U. Illinois), June 1992.
32. **Equipment for Empirical Verification of Sensor-Based Decision Making: Representation, Uncertainty, and Action**, National Science Foundation, PI, with G. Hager, 1991.
33. **Representations and Algorithms for Recognizing and Locating Three-Dimensional Objects from Monocular Images**, National Science Foundation, Co-PI with J. Ponce, (U. Illinois), 1991, 2 yrs.

PATENTS

1. *Delayed Processing for Arm Policy Determination for Content Management System Messaging*, App No.:15/793,787, pending October 25, 2017
2. *Live document detection in a captured video stream*, N.P. Welinder, P.N. Belhumeur, Y. Xiong, J. Baek, S.Kozlov, T. Berg, D. Kriegman , pending, July 2, 2016.
3. *Generating and Utilizing Normalized Scores for Classifying Digital Objects*, D. Kriegman, P. Belhumeur, T. Berg, P. Welinder, Filed US Patent 9,846,822, Issued December 19, 2017.
4. “*Navigating digital content using visual characteristics of the digital content*, ” P. N. Belhumeur, D. J. Kriegman, T. Berg, US Patent 9,448,704, Issued September 20, 2016.
5. “*Method and system for localizing parts of an object in an image for computer vision applications* ,” P.N. Belhumeur, D. Jacobs, D. Kriegman, N. Kumar, US Patent 9,275,273, Issued March 1, 2016.
6. “*Systems and method for changing hair color in digital images*,” S. P. Mallick, H. Qiao, D. Kriegman, US Patent 9,142,054, Issued September 22, 2015.
7. “*Systems and methods for simulating accessory display on a subject*,” M. Flagg, S.P. Mallick, D. Kriegman, US patent 9,058,605, Issued June 16, 2015.
8. “*System and Method for Creating and sharing personalized Virtual Makeovers*,” S.P. Mallick, D. Kriegman, K. Barnes, U.S. 9,058,765, Issued June 16, 2015.
9. “*Method and System for Localizing Parts of an Object in an Image For Computer Vision Applications*,” P.N. Belhumeur, D. Jacobs, D. Kriegman, N. Kumar, US Patent US8811726 B2, Issued August 19, 2014.
10. “*System and method for changing hair color in digital images*,” S.P. Mallick, H. Qiao, D. Kriegman, US patent 8,884,980, issued Nov. 11, 2014.
11. “*System and method for providing and modifying a personalized face chart*,” D. Fidaleo, B. Foust, J. Neuman, S. Mallick, K. Barnes, D. Kriegman, D, US patent 8,550,818, Issued Oct. 8, 2013.
12. “*System and Method for Providing a Personalized Face Chart*,” S.P. Mallick, K. Barnes, M. Ciafardini Kirkland, K. Dougherty, D. John, D. Kriegman, V. Patel, US patent 8,523,570, Issued Nov. 24, 2011.
13. “*System and Methods for a Embedded Virtual Makeover Try-on Tool*,” K. Barnes, J. Dimm, D. Kriegman, S. Mallick, V. Patel, patent pending, 7/21/2009.
14. “*Method of Monetizing Online Personalized Beauty Product Selections*,” D. Kriegman, K. Barnes, S.P. Mallick, D. John, V. Patel, patent pending, 3/17/08.
15. “*Method for Editing Multi-Channel Images*,” S.P. Mallick, T. Zickler, D. Kriegman, P. Belhumeur, US 7,860,306, Dec. 28 2010
16. “*Methods for Identifying, Separating and Editing Reflection Components in Multi-Channel Images and Videos*,” S.P. Mallick, T. Zickler, D. Kriegman, P. Belhumeur, US 7,689,035B2, Mar. 30, 2010.
17. “*Illumination Based Image Synthesis*,” P.N. Belhumeur, D.J. Kriegman, A.S. Georghiadis, US patent 6,697,518, Feb. 24, 2004.
18. “*A Method of Face Recognition Using Class Specific Linear Projection*,” provisional patent.

Publications

I: BOOKS AND CHAPTERS

1. J. Ho, D. Kriegman, “*On the Effect of Illumination and Face Recognition*, **Face Processing: Advanced Modeling and Methods**, R. Chellappa, W. Zhao, Editors, 2006, pp. 339–384.
2. D. Kriegman, “*Vision Sensors for Robots*,” in **Encyclopedia of Physical Science and Technology**, Academic Press, 3rd edition, Vol. 17, 2002, pp. 475–488.
3. D. Kriegman, G. Hager, A.S. Morse, Editors, **The Confluence of Vision and Control**, LNCIS series, Springer-Verlag, July, 1998.
4. D. Kriegman, P. Belhumeur, A Georghiadis, “*Representations for Recognition Under Variable Illumination*,” in **Shape, Contour and Grouping in Computer Vision**, D.A. Forsyth, J.L. Mundy, V. Gesu, R. Cipolla (Eds), Springer-Verlag, 1999, pp. 95–131.

5. P. Belhumeur, D. Kriegman, A. Yuille, “*Shadows, Shading, and Projective Geometry*,” in **Shape, Contour and Grouping in Computer Vision**, D.A. Forsyth, J.L. Mundy, V. Gesu, R. Cipolla (Eds), Springer-Verlag, 1999, pp. 132-153.
6. J. Ponce, D. Kriegman, S. Petitjean, S. Sullivan, G. Taubin, B. Vijayakumar, “*Representations and Algorithms for 3D Curved Object Recognition*,” in **Three-Dimensional Object Recognition Systems**, A. Jain and P. Flynn, eds., Elsevier Press, 1993, pp. 327–352.
7. J. Ponce, D. Kriegman, “*Elimination Theory and Computer Vision: Recognition and Positioning of Curved 3D Objects from Range, Intensity, or Contours*,” in **Symbolic and Numerical Computation for Artificial Intelligence**, B. Donald, D. Kapur, J. Mundy, eds., Academic Press, 1992, pp. 123–146.
8. J. Ponce, D. Kriegman, “*Toward 3D Curved Object Recognition from Image Contours*,” in **Geometric Invariance in Computer Vision**, J. Mundy and A. Zisserman, eds., MIT Press, 1992, pp. 408–439.

II: JOURNAL ARTICLES

9. Z. Murez, T. Treibitz, R. Ramamoorthi, D. Kriegman, “*Photometric Stereo in a Scattering Medium*,” *IEEE Trans. Pattern Analysis and Machine Intelligence*, 2017, pp. 1880–1891.
10. B. Neal, A. Khen, T. Treibitz, O. Beijbom, G. OConner, M. Coffroth, N. Knowlton, D. Kriegman, G. Mitchell, D. Kline, “*Caribbean massive corals not recovering from repeated thermal stress events during 2005/2013*,” **Ecol Evol.** ,2017;7: 13391353.
11. O. Beijbom, T. Treibitz, D. I. Kline, G. Eyal, A. Khen, B. Neal, Y Loya, B.G. Mitchell, D. Kriegman. “*Improving Automated Annotation of Benthic Survey Images Using Wide-band Fluorescence*,” **Nature, Scientific Reports**, 2016.
12. O. Beijbom, P.J. Edmunds, C. Roelfsema, J. Smith, D.I. Kline, B.P. NeaL, M.J. Dunlap, V. Moriarty, T-Y. Fan, C-J Tan, S. Chan, T. Treibiz, A. Gamst, B.G. Mitchell, D. Kriegman, “*Towards Automated Annotation of Benthic Survey Images: Variability of Human Experts and Operational Modes of Automation*,” **PLOS ONE**, July 8, 2015.
13. T. Treibitz, B.P. Neal, D.I. Kline, O. Beijbom, P.L.D. Roberts, G.B. Mitchell, D. Kriegman, “*Wide Field-of-View Fluorescence Imaging of Coral Reefs*”, **Nature, Scientific Reports**, 2015.
14. B. P. Neal, T-H Lin, R. Winter, T. Treibitz, O. Beijbom, D. Kriegman, D. I. Kline, B. G. Mitchell, “*Methods and measurement variance for field estimations of coral colony planar area using underwater photographs and semi-automated image segmentation*,” **Environmental Monitoring and Assessment**, 187(8), Aug. 2015
15. M. Balasubramanian, E. Arias-Castro, F. Medeiros, D. Kriegman, C. Bowd, R. Weinreb, M. Holst, P. Sample, and L. Zangwill, “*Detecting Glaucoma Progression from Localized Rates of Retinal Changes in Parametric and Nonparametric Statistical Framework with Type I Error Control*,” **Investigative Ophthalmology and Visual Science**, Mar. 19, 2014, pp. 1684–95.
16. P. Belhumeur, D. Jacobs, D. Kriegman, N. Kumar, “*Localizing Parts of Faces Using a Consensus of Exemplars*,” **IEEE Transactions on Pattern Analysis and Machine Intelligence**, Invited to Special Issue on Best Papers from CVPR 2012, Dec. 2013, pp. 2930 – 2940.
17. M. Balasubramanian, D. Kriegman, C. Bowd, M. Holst, R. Weinreb, P. Sample, and L. Zangwill, “*Localized Glaucomatous Change Detection within the Proper Orthogonal Decomposition Framework*,” **Investigative Ophthalmology & Visual Science**, 53(7): 3615-3628, 2012.
18. S. Magda, D. Kriegman, P. Belhumeur, “*Photometric Ranging of Surfaces with Complex Reflectance*,” **International Journal of Computer Vision**, 2007, submitted.
19. M.K. Chandraker, S. Agarwal, D.J. Kriegman, S. Belongie, “Globally Optimal Algorithms for Stratified Autocalibration,” **International Journal of Computer Vision**, 90(2):236-254, November 2010.
20. N. Joshi, W. Matusik, A.E. Adelson, D. Kriegman, “*Personal Photo Enhancement using Prior Images*,” **ACM Transactions on Graphics**, 29(2), March 2010.
21. J. Wills, S. Agarwal, D. Kriegman, S. Belongie, “*Toward a Perceptual Space for Reflectance*,” **ACM Transactions on Graphics**, 28(4) Aug. 2009, pp. 103:1–103:15.
22. F. Kahl, S. Agarwal, M. Chandraker, D. Kriegman, and S. Belongie, “*Practical Global Optimization for Multiview Geometry*,” **International Journal of Computer Vision**, 79(3) Sept. 2008, pp. 271–284.

23. T. Zickler, S. Mallick, D. Kriegman, P. Belhumeur, “Color Subspaces as Photometric Invariants,” **International Journal of Computer Vision**, 79(1) Aug. 2008, pp. 13–30.
24. S. Romdhani, J. Ho, T. Vetter, D. Kriegman, “Face Recognition using 3-D Models: Pose and Illumination,” **Proceedings of the IEEE**, 94(11), Nov. 2006, pp. 1977–1999.
25. Y. Furukawa, A. Sethi, J. Ponce, D. Kriegman, “Robust Structure and Motion from Outlines of Smooth Curved Surfaces,” **IEEE Transactions on Pattern Analysis and Machine Intelligence**, 29(2), Feb. 2006, pp. 302–315.
26. K.C. Lee, J. Ho, M.H. Yang, D. Kriegman, “Visual Tracking and Recognition Using Probabilistic Appearance Manifolds,” **Computer Vision and Image Understanding**, 99(3), 2005, pp. 303–331.
27. S.P. Mallick, B. Carragher, C.S. Potter, D.J. Kriegman, “ACE: Automated CTF Estimation,” **Ultra-microscopy**, August 2005, pp. 8–29.
28. K.C. Lee, J. Ho, D. Kriegman, “Acquiring Linear Subspaces for Face Recognition under Variable Lighting,” **IEEE Transactions on Pattern Analysis and Machine Intelligence**, May, 2005, pp. 684–698.
29. A. Sethi, D. Renaudie, D. Kriegman, J. Ponce, “Curve and Surface Duals and the Recognition of Curved 3D Objects from their Silhouettes,” **International Journal of Computer Vision**, 58 (1), June 2004, pp. 73–86.
30. S. Mallick, Y. Zhu, D. Kriegman, “Detecting Particles in Cryo-EM Micrographs using Learned Features,” **Journal of Structural Biology**, 145(1), January, 2004, pp. 52–64.
31. Y. Zhu, B. Carragher, R. Glaeser, D. Fellmann, C. Bajaj, M. Bern, F. Mouch, F. de Haas, R.J. Hall, D. Kriegman, S. Ludtke, S. Mallick, P. Penczek, A. Roseman, F. Sigworth N. Volkman, C. Potter, “Automatic Particle Selection: Results of a Comparative Study,” **Journal of Structural Biology**, 145(1), January, 2004, pp. 3–14.
32. T. Zickler, P. Belhumeur, D. Kriegman, *Helmholtz Stereopsis: Exploiting Reciprocity for Surface Reconstruction*, **International Journal of Computer Vision**, Invited by guest editors to Special Issue on Multi-view Modeling and Rendering of Visual Scenes,” 49(2), September, 2002, pp. 215–227.
33. Y. Zhu, G. Xu, D. Kriegman, “A Real-Time Approach to the Spotting, Representation and Recognition of Hand Gestures for Human-Computer Interaction,” **Computer Vision and Image Understanding**, 85(3), March 2002, pp. 189–208.
34. M.H. Yang, D. Kriegman, N. Ahuja, “Detecting Faces in Images: A Survey,” **IEEE Transactions on Pattern Analysis and Machine Intelligence**, 24(1), January, 2002, pp. 34–58.
35. M.H. Yang, D. Kriegman, N. Ahuja, “Face Detection Using Multimodal Density Models,” **Computer Vision and Image Understanding**, Vol. 84, 2001, pp. 264–284.
- ¹ 36. Y. Zhu, B. Carragher, D. Kriegman, R. Milligan, C. Potter, “Automated Identification of Filaments in Cryoelectron Microscopy Images,” **Journal of Structural Biology**, Vol. 135, 2001, pp. 302–312.
37. D. Kriegman, P. Belhumeur, “What Shadows Reveal About Object Structure,” **Journal of the Optical Society of America - A**, 18(8), August, 2001, pp. 1804–1813.
38. M.J. Tarr, D. Kriegman, “What defines a view?,” **Vision Research**, 41(15), July, 2001, pp. 1981–2004.
39. A. Georgiades, P. Belhumeur, D. Kriegman, “From Few to Many: Illumination Cone Models for Face Recognition under Variable lighting and Pose,” **IEEE Transactions on Pattern Analysis and Machine Intelligence**, June, 2001, 643–660.
40. B. Carragher, N. Kisseberth, D. Kriegman, R. Milligan, C. Potter, J. Pulokas, A. Reilein, “Leginon: Automated Acquisition of Images from Vitreous Ice Specimens,” **Journal of Structural Biology**, Vol. 132, pp. 33–45, 2000.
41. P. Belhumeur, D. Kriegman, A. Yuille, “The Generalized Bas-Relief Ambiguity,” **International Journal of Computer Vision**, 35(1), 1999, pp. 33–44.
42. B. Vijayakumar, D. Kriegman, J. Ponce, “Invariant-Based Recognition of Complex Curved 3-D Objects from Image Contours,” **Computer Vision and Image Understanding** (formerly CVGIP and CVGIP:IU), 72(3), Dec. 1998, pp. 287–303.

¹2003 Paper of the Year Award, Journal of Structural Biology.

43. P. Belhumeur, D. Kriegman, “*What is the Set of Images of an Object Under All Possible Lighting Conditions?*,” **International Journal of Computer Vision**, 28(3), 1998, pp. 245–260.
44. C.J. Taylor, D. Kriegman, “*Vision-Based Motion Planning and Exploration for Mobile Robots*,” **IEEE Transactions on Robotics and Automation**, 14(3), June 1998, 417–426.
45. D. Kriegman, “*Let Them Fall Where They May: Capture Regions of Curved Objects and Polyhedra*,” **International Journal of Robotics Research**, 16(4), Aug. 1997, pp. 448–472.
46. P. Belhumeur, J. Hespanha, D. Kriegman, “*Eigenfaces vs. Fisherfaces: Recognition Using Class Specific Linear Projection*,” **IEEE Transactions on Pattern Analysis and Machine Intelligence**, Special issue on face recognition, July 1997, pp. 711–720.
47. T. Joshi, B. Vijayakumar, D. Kriegman, J. Ponce, “*HOT Curves for Modelling and Recognition of Smooth Curved 3D Shapes*,” **Image and Vision Computing**, Invited for Promising Directions Track, 15(7), July 1997, 479–498.
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