

Hany Farid

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APPOINTMENTS	Neukom Institute for Computational Science <i>Director</i>	2008 – present
	Dartmouth College <i>David T. McLaughlin Distinguished Professor of Computer Science</i>	2007 – present
	Dartmouth College <i>Professor, Department of Computer Science</i>	2007
	Dartmouth College <i>Associate Professor, Department of Computer Science</i>	2004 – 2006
	Dartmouth College <i>Assistant Professor, Department of Computer Science</i>	1999 – 2004
EDUCATION	Massachusetts Institute of Technology <i>Postdoctoral Fellow, Brain and Cognitive Sciences</i>	1997 – 1999
	University of Pennsylvania <i>Ph.D., Computer Science</i>	1993 – 1997
	State University of New York at Albany <i>M.S., Computer Science</i>	1990 – 1992
	University of Rochester <i>B.S., Computer Science with Applied Mathematics</i>	1984 – 1988
AWARDS	John Simon Guggenheim Fellowship, Dartmouth College, 2006 Alfred P. Sloan Fellowship, Dartmouth College, 2002 Graduate Teaching Award, University of Pennsylvania, 1994	
GRANTS	National Science Foundation. <i>Instrument Development for Biological Research</i> (212K), Co-PI, 2008 National Science Foundation. <i>Digital Imaging Laboratory at Dartmouth</i> (427K), 2007 Department of Homeland Security. <i>Digital Video Forensics</i> (255K), 2007 Howard Hughes Medical Institute. <i>Undergraduate Science Education</i> (1.5M), Co-PI, 2006 United States Air Force. <i>Digital Image Forensics</i> (380K), 2006 National Science Foundation. <i>The Evolution of Mate Choice in Damselflies</i> (535K), Co-PI, 2005 Bureau of Justice Assistance. <i>Digital Image Forensics</i> (125K), 2005 Microsoft Corp. (175K), 2005, 2006, 2007 Adobe Systems, Inc. (110K), 2004, 2006, 2008 National Institute of Justice. <i>Digital Tampering and Secrets</i> (690K), 2003 National Institute of Justice. <i>Detecting Digital Tampering</i> (250K), 2000 National Science Foundation. <i>CAREER: Mixing and Separating Digital Images</i> (315K), 2000	
PUBLICATIONS (JOURNAL)	H. Farid. A Survey of Image Forgery Detection. <i>IEEE Signal Processing Magazine</i> , 2009 (in press). L. Shen, H. Farid and M.A. McPeck. Modeling 3-Dimensional Morphological Structures using Spherical Harmonics. <i>Evolution</i> , 2008 (in press). M.A. McPeck, L. Shen and H. Farid. The Correlated Evolution of 3-Dimensional Reproductive Structure Between Male and Female Damselflies. <i>Evolution</i> , 2008 (in press).	

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- S. Lyu and H. Farid. Detecting Hidden Messages Using Higher-Order Statistics and Support Vector Machines. *5th International Workshop on Information Hiding*, Noordwijkerhout, The Netherlands, 2002.
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V. Maljkovic, P. Martini and H. Farid. The Contribution of Statistical Image Differences to Human Rapid Categorization of Natural Scenes is Negligible. *Vision Sciences*, Sarasota, FL, 2006.

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V. Maljkovic, P. Martini and H. Farid. The Time-Course of Categorization of Real-Life Scenes with Affective Content. *Vision Sciences*, Sarasota, FL, 2004.

H. Sun, H. Farid D. Roberts, K. Rick, A. Kartov, and K. Paulsen. A Non-contacting 3-D Digitizer For Use in Image-Guided Neurosurgery. *American Society for Stereotactic and Functional Neurosurgery*, New York City, 2003.

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M.J. Bravo and H. Farid. Top-Down and Bottom-Up Processes for Object Segmentation. *Vision Sciences*, Sarasota, FL, 2001.

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H. Farid and E.H. Adelson. Standard Mechanisms Can Explain Grouping in Temporally Synchronous Displays. *Investigative Ophthalmology and Visual Science*, Fort Lauderdale, FL, 2000.

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H. Farid, P.S. Shenkin, J. Greene and J.S. Fetrow. Prediction of Side Chain Conformations in Protein Cores and Loops From Rotamer Libraries. *ASBMB/Biophysical Society Joint Meeting*, Houston, TX, 1992.

MISCELLANEOUS

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H. Farid. Photography Changes What We are Willing to Believe, *Smithsonian Photography Initiative: Click Photography Change Everything*, 2008.

PUBLICATIONS (TECHNICAL REPORT)

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H. Farid. Digital Image Ballistics from JPEG Quantization. TR2006-583, Department of Computer Science, Dartmouth College, September 2006.

K. Johnson and H. Farid. Metric Measurements on a Plane from a Single Image. TR2006-579, Department of Computer Science, Dartmouth College, August 2006.

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H. Farid, S.W. Lee, and R. Bajcsy. View Selection Strategies for Multi-View, Wide-Baseline Stereo. Technical Report, Department of Computer Science, University of Pennsylvania, 1994.

POPULAR PRESS

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 Digital Secrecy in *EurekAlert, GlobalTechnoScan, Popular Technologies, and ScienceDaily*, 8.10.01

INVITED TALKS

Estimating and Modeling Complex Lighting Environments, University of Pennsylvania, 10.08
 Digital Tampering and Forensics, National Institute of Standards, 10.08
 Digital Tampering and Forensics, University of Massachusetts, Amherst, 10.08
 Digital Image Forensics, American Society of Clinical Radiologists, 9.08
 Digital Tampering and Forensics, SUNY Albany, 9.08
 Digital Tampering and Forensics, Electronic Imaging Symposium (plenary talk), 1.08
 Digital Image Forensics, The National Academies, 1.08
 Digital Image Forensics, IBM Almaden, 11.07
 Digital Image Forensics, University of California, Berkeley, 11.07
 A Digital Technique for Art Authentication, Harvard University Art Museum, 10.07
 Digital Image Forensics, Google, 4.07
 Digital Image Forensics, Foveon Inc., 4.07
 Exposing Digital Forgeries from Inconsistencies in Lighting, Carnegie Mellon University, 3.07
 Digital Forensics, American Association for the Advancement of Science, 2.07
 Digital Image Forensics, The Associated Press, 2.07
 Exposing Digital Forgeries from Inconsistencies in Lighting, University of Pennsylvania, 2.07
 Digital Tampering in the Media, Politics and Law, University of Pennsylvania, 2.07
 Digital Image Forensics, Central Intelligence Agency, 12.06
 From Photons to Pixels to Photoshop, Project Safe Childhood Conference, 12.06
 Digital Image Forensics, Stanford University, 10.06
 From Photons to Pixels to Photoshop, Crimes Against Children Conference, 8.06
 Digital Image Forensics, Microsoft Corp., 6.06
 A Digital Technique for Art Authentication, Rochester Memorial Art Gallery, 5.06
 Digital Image Forensics, Eastman Kodak, 5.06
 Digital Image Forensics, Google, 5.06
 Digital Image Forensics, University of California, Davis, 5.06
 Digital Image Forensics, National Academy of Sciences, 5.06
 A Digital Technique for Art Authentication, San Diego Museum of Art, 3.06
 A Picture is Worth a Thousand Lies, Dartmouth College, 2.06
 Digital Image Forensics, Ricoh Innovations, 11.05
 Energy vs. Synchrony in Perceptual Grouping, Univ. of California, San Diego, 11.05
 From Photons to Pixels to Photoshop, Delaware Department of Justice, 9.05
 From Photons to Pixels to Photoshop, High Tech. Crime Investigation Assoc., 8.05
 Digital Image Forensics, National Association of Attorneys General, 6.05
 How Realistic is Photorealistic?, University of California, Santa Cruz, 6.05
 Digital Image Forensics, University of California, Berkeley, 5.05
 Digital Image Forensics, University of California, Santa Cruz, 5.05
 Digital Image Forensics, National Association of Attorneys General, 5.05
 Digital Image Forensics, Adobe Systems, 4.05
 Digital Image Forensics, Office of Research Integrity, 1.05
 Digital Image Forensics, University of New Hampshire, 12.04
 Digital Image Forensics, New Hampshire Cyber Crime Network, 12.04
 Digital Image Forensics, Leslie Center for the Humanities, Dartmouth College, 11.04
 Reconstructing Ancient Egyptian Tombs, Society for Imaging Science and Tech., 10.04
 Digital Image Forensics, Adobe Systems, 10.04
 Digital Image Forensics, National Association of Attorneys General, 9.04
 Digital Image Forensics, University of Pennsylvania, 7.04
 How Realistic is Photorealistic?, University of Illinois, 4.04
 Universal Steganalysis, Central Intelligence Agency, 2.04
 How Realistic is Photorealistic?, The Salk Institute, 1.04
 Grouping by Temporal Synchrony?, The Salk Institute, 1.04
 How Realistic is Photorealistic?, Stevens Institute of Technology, 12.03
 How Realistic is Photorealistic?, Massachusetts Institute of Technology, 11.03
 How Realistic is Photorealistic?, Harvard University, 11.03

How Realistic is Photorealistic?, University of Chicago, 11.03
 How Realistic is Photorealistic?, University of Maryland, 11.03
 Grouping by Temporal Synchrony?, University of Chicago, 10.03
 Mixing and Unmixing Digital Images, Harvard University, 10.02
 Temporal Synchrony in Perceptual Grouping?, University of Rochester, 9.02
 Mixing and Unmixing Digital Images, New York University, 4.02
 Mixing and Unmixing Digital Images, University of Pennsylvania, 3.02
 Digital Tampering, Washington Univ. St. Louis, 1.02
 Digital Secrets, Boston University, 12.01
 Grouping by Temporal Synchrony, Harvard University, 11.01
 Blind Removal of Image Non-Linearities, Columbia University, 11.01
 Blind Removal of Image Non-Linearities, Massachusetts Institute of Technology, 10.01
 Grouping by Temporal Synchrony, New York University, 10.01
 Grouping by Temporal Synchrony, Massachusetts Institute of Technology, 3.01
 Grouping by Temporal Synchrony, University of Pennsylvania, 3.01
 Grouping by Temporal Synchrony, Boston University, 2.01
 Blind Removal of Image Non-Linearities, University of Pennsylvania, 3.00
 Digital Image Separation, George Mason University, 3.00
 Grouping in Temporally Synchronous Displays, Dartmouth College, 12.99
 Separating Digital Images, Brooklyn Polytechnic University, 3.99
 Separating Digital Images, Dartmouth College, 3.99
 ICA for Separating Images, Massachusetts Institute of Technology, 2.99
 Separating Images, University of Pennsylvania, 10.98
 Monocular Stereo, Polaroid Inc, 7.98
 Digital Image Enhancement, Williams College, 4.98
 Monocular Stereo, Massachusetts Institute of Technology, 3.98
 Range Estimation by Optical Differentiation, University of California, Berkeley, 3.97
 A Differential Optical Range Camera, Sensar Inc., 11.96
 Direct Differential Range Estimation, Columbia University, 5.96
 Steerable Filters for Low-level Image Processing, SUNY at Albany, 11.95
 3-D Scene Reconstruction for Telepresence, UNC, Chapel Hill, 6.94

MENTOR Summer Robot Camp, Dartmouth College, 2004-2007
 Gates Millennium Scholarship, Dartmouth College, 2000
 Mellon Minority Scholarship, Dartmouth College, 2000
 Math Circle/Math Camp, 1998-2001, 2004
 NASA Quality Education for Minorities, U. of Penn, 1995-1996
 Philadelphia Math and Science Outreach, U. of Penn, 1994-1996

ASSOCIATE EDITOR IEEE Transactions on Information Forensics and Security, 2005-2008

PROGRAM Media Security and Forensics (Electronic Imaging), 2009
 COMMITTEE Technical Advisory Board for Berkman's Internet Safety Task Force, 2008
 Vision of the Unseen (CVPR Workshop), 2008
 Statistical Learning in Computer Vision (ECCV Workshop), 2004
 American Association for Artificial Intelligence (Vision/Perception), 2004
 Statistical Analysis in Computer Vision (CVPR Workshop), 2003

REVIEWER NSF review panel (ITR Medium), 2003
 NSF review panel (CAREER: RHA/CV), 2000, 2002, 2003
 NSF review panel (RHA/CV), 2000
 American Association for Artificial Intelligence (AAAI), Computer Analysis of Images and Patterns (CAIP), Computer Vision and Pattern, Recognition (CVPR), Electronics Letters, European Conference on Computer Vision (ECCV), IEEE Transactions on Image Processing, IEEE

Transactions on Multimedia, IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE Transactions on Signal Processing, IEEE Security and Privacy, Information Hiding, International Conference on Computer Vision (ICCV), International Journal of Computer Vision, International Journal of Imaging Systems and Technology, Journal of Cognitive Neuroscience, Journal of the Optical Society of America, Journal of Visual Communication and Image Representation, Medical Physics, Perception, Proceedings of the Royal Society: Biological Sciences, SIGGRAPH, Vision and Applications, Vision Research

STUDENTS

Daniel Hopkins, '10, Mathematics, senior research advisor
Kimo Johnson (2007), Computer Science, Ph.D. advisor
Eric Kee, Computer Science, Ph.D. advisor
Jethro Rothe-Kushel '03, Religion, senior research advisor
Siwei Lyu (2005), Computer Science, Ph.D. advisor
David Martin '00, Computer Science, senior thesis advisor
Kiley McEvoy, '06, Engineering, senior research advisor
Joseph Pechter '04, Computer Science, senior thesis advisor
William Pechter '04, Computer Science, senior thesis advisor
Senthil Periaswamy (2003), Computer Science, Ph.D. advisor
Andrew Pierce '02, Mathematics, senior research advisor
Alin Popescu (2005), Computer Science, Ph.D. advisor
Nelson Rosa '06, Engineering, senior research advisor
Katherine Sherwin '01, Engineering/Physics, senior research advisor
Hai Sun (2004), Engineering, Ph.D. co-advisor
Weihong Wang, Computer Science, Ph.D. advisor

TEACHING

Numerical and Computational Tools for Applied Science, CS 36/136, Summer 08
Concepts in Computing, CS 4, Summer 08
Numerical and Computational Tools for Applied Science, CS 36/136, Summer 07
Concepts in Computing, CS 4, Summer 07
Concepts in Computing, CS 4, Winter 06
Numerical Methods in Computer Vision, CS 188/88, Fall 04
Concepts in Computing, CS 4, Summer 03
Concepts in Computing, CS 4, Summer 02
Data Structures and Programming, CS 15, Winter 02
Data Structures and Programming, CS 15, Fall 01
Numerical Linear Algebra, CS106, Spring 01
Data Structures and Programming, CS 15, Winter 01
Data Structures and Programming, CS 15, Fall 00
Fundamentals of Image Processing, CS 188/88, Spring 00
Programming Languages, CS 68, Winter 00
Data Structures and Programming, CS 15, Fall 99

COLLEGE
COMMITTEES

Associate Chair, 2004-present
Ph.D. Advisor, 2004-2006
Steering Committee, Neuroscience Major, 2004-2008
Director Search, Neukom Institute for Computational Science, 2005
HHMI Undergraduate Biological Sciences Education Proposal, 2005
Green Grid Computing, 2004-2005
Computer Science Building Expansion, 2003-2005
Faculty Search, Thayer School of Engineering, 2004
Department Web Master, 1999-2004
Faculty Recruiting, 2003
Ph.D. Graduate Admissions 2001-2003
Associate Director Search, ISTS, 2002

M.D./Ph.D. Admission, 2001