

APPOINTMENTS	<p><b>University of California, Berkeley</b> <span style="float: right;"><b>2019 – present</b></span>  <i>Professor, Electrical Engineering and Computer Sciences (50%)</i>  <i>Professor, School of Information (50%)</i>  <i>Member, Berkeley Artificial Intelligence Research Lab</i>  <i>Member, Center for Innovation in Vision and Optics</i>  <i>Senior Faculty Advisor, Center for Long-Term Cybersecurity</i>  <i>Member, Development Engineering</i>  <i>Member, Vision Science Program</i></p> <p><b>Dartmouth College, Department of Computer Science</b> <span style="float: right;"><b>1999 – 2019</b></span>  <i>Albert Bradley 1915 Third Century Professor</i> <span style="float: right;">2016 – 2019</span>  <i>Department Chair</i> <span style="float: right;">2015 – 2018</span>  <i>Professor</i> <span style="float: right;">2011 – 2016</span>  <i>William H. Neukom 1964 Distinguished Professor of Computational Science</i> <span style="float: right;">2008 – 2011</span>  <i>David T. McLaughlin Distinguished Professor of Computer Science</i> <span style="float: right;">2007 – 2008</span>  <i>Professor</i> <span style="float: right;">2006 – 2007</span>  <i>Associate Professor</i> <span style="float: right;">2004 – 2006</span>  <i>Assistant Professor</i> <span style="float: right;">1999 – 2004</span></p> <p><b>Dartmouth College, Tuck School of Business</b> <span style="float: right;"><b>2016 – 2019</b></span>  <i>Adjunct Professor of Business Administration</i></p> <p><b>Dartmouth College, Neukom Institute for Computational Science</b> <span style="float: right;"><b>2008 – 2011</b></span>  <i>Director</i></p>
PROFESSIONAL	<p><b>Coalition for Content Provenance and Authenticity</b> <span style="float: right;"><b>2021 – present</b></span>  <i>Steering Committee</i></p> <p><b>Content Authenticity Initiative</b> <span style="float: right;"><b>2023 – present</b></span>  <i>Advisor</i></p> <p><b>Counter Extremism Project</b> <span style="float: right;"><b>2016 – present</b></span>  <i>Senior Advisor</i></p> <p><b>Cyber Civil Rights Initiative</b> <span style="float: right;"><b>2019 – present</b></span>  <i>Board of Directors</i></p> <p><b>Global Disinformation Index</b> <span style="float: right;"><b>2019 – present</b></span>  <i>Technical Advisory Board</i></p> <p><b>Human Rights Center, University of California, Berkeley, School of Law</b> <span style="float: right;"><b>2019 – present</b></span>  <i>Advisory Board</i></p> <p><b>LinkedIn</b> <span style="float: right;"><b>2022 – present</b></span>  <i>Scholar</i></p> <p><b>Metaphysic</b> <span style="float: right;"><b>2023 – present</b></span>  <i>Scientific Advisory Board</i></p> <p><b>Snap</b> <span style="float: right;"><b>2021 – present</b></span>  <i>Safety Advisory Board</i></p> <p><b>Truepic, Inc.</b> <span style="float: right;"><b>2018 – present</b></span>  <i>Senior Advisor</i></p> <p><b>Fourandsix Technologies, Inc.</b> <span style="float: right;"><b>2011 – 2018</b></span>  <i>Co-founder &amp; Chief Technology Officer</i></p> <p><b>TikTok, USA</b> <span style="float: right;"><b>2020 – 2022</b></span>  <i>Content Advisory Council</i></p>
EDUCATION	<p><b>Massachusetts Institute of Technology</b> <span style="float: right;"><b>1997 – 1999</b></span>  <i>Postdoctoral Fellow, Brain and Cognitive Sciences (advisor: Ted Adelson)</i></p> <p><b>University of Pennsylvania</b> <span style="float: right;"><b>1993 – 1997</b></span>  <i>Ph.D., Computer Science (advisor: Eero Simoncelli)</i></p> <p><b>State University of New York at Albany</b> <span style="float: right;"><b>1990 – 1992</b></span>  <i>M.S., Computer Science</i></p> <p><b>University of Rochester</b> <span style="float: right;"><b>1984 – 1988</b></span>  <i>B.S., Computer Science with Applied Mathematics</i></p>

PUBLICATIONS (IMPACT)	$h$ -index=74; total citations=23,714; i1000-index=4; i500-index=12; i250-index=26; i100-index=60; i10-index=146. <sup>1</sup>
PUBLICATIONS (BOOK)	H. Farid. <i>Fake Photos</i> , MIT Press, Essential Knowledge Series, 2019.  H. Farid. <i>Photo Forensics</i> , MIT Press, 2016.
PUBLICATIONS (JOURNAL)	E. Booth, J. Lee, M.A. Rizoïu, and H. Farid. Conspiracy, Misinformation, Radicalisation: Understanding the online pathway to indoctrination and opportunities for intervention. <i>Journal of Sociology</i> , 2024.  M. Boháček and H. Farid. The Making of an AI News Anchor – and its Implications. <i>Proceedings of the National Academy of Sciences</i> , 121(1), 2024.  E.A. Cooper, R. Casati, H. Farid, and P. Cavanagh. The Art of the Float. <i>Journal of Vision</i> , 23(8):13, 2023.  Z. Epstein, A. Hertzmann, M. Akten, H. Farid, J. Fjeld, M.R. Frank, M. Groh, L. Herman, N. Leach, R. Mahari, A. Pentland, O. Russakovsky, H. Schroeder, and A. Smith. Art and the Science of Generative AI. <i>Science</i> , 380(6650):1110-1111, 2023.  S. Barrington and H. Farid. A Comparative Analysis of Human and AI Performance in Forensic Estimation of Physical Attributes. <i>Scientific Reports</i> , 13(4784), 2023.  M. Boháček and H. Farid. Protecting World Leaders Against Deep Fakes using Facial, Gestural, and Vocal Mannerisms. <i>Proceedings of the National Academy of Sciences</i> , 119(38), 2022.  H. Farid. Creating, Using, Misusing, and Detecting Deep Fakes. <i>Journal of Online Trust and Safety</i> , 1(4), 2022.  S.J. Nightingale and H. Farid. AI-Synthesized Faces are Indistinguishable from Real Faces and More Trustworthy. <i>Proceedings of the National Academy of Sciences</i> , 119(8), 2022.  H. Farid. An Overview of Perceptual Hashing. <i>Journal of Online Trust and Safety</i> , 1(1), 2021.  S.J. Nightingale, S. Agarwal, and H. Farid. Perceptual and Computational Detection of Face Morphing. <i>Journal of Vision</i> , 21(3):4, 2021.  J. Dressel and H. Farid. The Dangers of Risk Prediction in the Criminal Justice System. <i>MIT Case Studies in Social and Ethical Responsibilities of Computing</i> , February, 2021.  S.J. Nightingale and H. Farid. Assessing the Reliability of a Clothing-Based Forensic Identification. <i>Proceedings of the National Academy of Sciences</i> , 117(10):5176-5183, 2020.  S.J. Nightingale, K.A. Wade, H. Farid, and D.G. Watson. Can People Detect Errors in Shadows and Reflections? <i>Attention, Perception, &amp; Psychophysics</i> , 81(8):2917-2943, 2019.  H. Farid. Image Forensics. <i>Annual Review of Vision Science</i> , 5(1):549-573, 2019.  H. Farid. Reining in Online Abuses. <i>Technology and Innovation</i> , 19(3):593-599, 2018.  J. Dressel and H. Farid. The Accuracy, Fairness, and Limits of Predicting Recidivism, <i>Science Advances</i> , 4(1):eaao5580, 2018.

<sup>1</sup> $h$ -index = largest number  $h$  such that  $h$  publications have at least  $h$  citations;  $iN$ -index = number of publications with at least  $N$  citations. Citation counts according to GoogleScholar as of April 2024.

- B. Mader, M.S. Banks, and H. Farid. Identifying Computer-Generated Portraits: The Importance of Training and Incentives. *Perception*, 46(9):1062-1076, 2017.
- K. Greenham, P. Lou, J.R. Puzey, G. Kumar, C. Arnevik, H. Farid, J. H. Willis, and C.R McClung. Geographic Variation of Plant Circadian Clock Function in Natural and Agricultural Settings. *Journal of Biological Rhythms*, 32(1):26-34, 2016.
- M.J. Bravo and H. Farid. Observers Change their Target Template Based on Expected Context. *Attention, Perception, & Psychophysics*, 78(3):829-837, 2016.
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- E.A. Cooper and H. Farid. Does the Sun Revolve Around the Earth? A Comparison between the General Public and On-line Survey Respondents in Basic Scientific Knowledge. *Public Understanding of Science*, 25(2):146-153, 2016.
- S. Pittala, E. Whiting, and H. Farid. A 3-D Stability Analysis of Lee Harvey Oswald in the Backyard Photo. *Journal of Digital Forensics, Security and Law*, 10(3):87-98, 2015.
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- E. Kee, J. O'Brien, and H. Farid. Exposing Photo Manipulation from Shading and Shadows. *ACM Transactions on Graphics*, 33(5):165:1-165:21, 2014.
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- R.H. Lilien, H. Farid and B.R. Donald. Probabilistic Disease Classification of Expression-Dependent Proteomic Data from Mass Spectrometry of Human Serum. *Journal of Computational Biology*, 10(6):925-946, 2003.
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- A. Heimsath and H. Farid. Hillslope Topography from Unconstrained Photographs. *Mathematical Geology*, 34(8):929-952, 2002.
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H. Farid. How to Detect Faked Photos. *American Scientist*, March-April, 2017.

H. Farid. Seeing Is Not Believing. *IEEE Spectrum*, 46(8):44-48, 2009.

H. Farid. Digital Image Forensics. *Scientific American*, 298(6):66-71, 2008.

H. Farid. Digital Doctoring: How to tell the real from the fake. *Significance*, 3(4):162-166, 2006.

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H. Farid. Is Seeing Believing. *New Scientist*, 179(2411):38-41, 2003.

H. Farid and S. Farid. Unfolding Sennedjem's Tomb. *KMT: A Modern Journal of Ancient Egypt*, 12(1):46-59, 2001.

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H. Farid. Photo Fakery and Forensics. In *Advances in Computers*, Volume 77, Academic Press, 2009.

H. Farid. Digital Doctoring: can we trust photographs? In *Deception: From Ancient Empires to Internet Dating*, Stanford University Press, 2009.

PUBLICATIONS  
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CONFERENCE  
PAPER)

G.J.A. Porcile, J. Gindi, S. Mundra, J.R. Verbus, and H. Farid, Finding AI-Generated Faces in the Wild, *Workshop on Media Forensics at CVPR*, 2024.

M. Bohacek and H. Farid. Lost in Translation: Lip-Sync Deepfake Detection from Audio-Video Mismatch, *Workshop on Media Forensics at CVPR*, 2024.

J. Norman and H. Farid. An Investigation into the Impact of AI-Powered Image Enhancement on Forensic Facial Recognition. *Workshop on Media Forensics at CVPR*, 2024.

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M. Boháček and H. Farid. A Geometric and Photometric Exploration of GAN and Diffusion Synthesized Faces, *Workshop on Media Forensics at CVPR*, 2023.

S. Mundra, G.J.A. Porcile, S. Marvaniya, J.R. Verbus, and H. Farid. Exposing GAN-Generated Profile Photos from Compact Embeddings, *Workshop on Media Forensics at CVPR*, 2023.

N. Galstyan, J. McCauley, H. Farid, S. Ratnasamy, and S. Shenker. Global Content Revocation on the Internet: A Case Study in Technology Ecosystem Transformation, *20th ACM Workshop on Hot Topics in Networks*, Austin, TX, 2022.

B. Levine, J.J. Kumar, H. Farid, E. Dixon, and E. Ikponmwoba. Indications of Child Sexual Abuse Revealed in App Store Reviews, *Workshop on Kids' Online Privacy and Safety at SOUPS*, 2022.

C. Gerstner and H. Farid. Detecting Real-Time Deep-Fake Videos Using Active Illumination, *Workshop on Media Forensics at CVPR*, 2022.

N. Thakkar, G. Pavlakos, and H. Farid. The Reliability of Forensic Body-Shape Identification, *Workshop on Media Forensics at CVPR*, 2022.

- N. Thakkar and H. Farid. On the Feasibility of 3D Model-Based Forensic Height and Weight Estimation, *Workshop on Media Forensics at CVPR*, 2021.
- S. Agarwal and H. Farid. Detecting Deep-Fake Videos from Aural and Oral Dynamics, *Workshop on Media Forensics at CVPR*, 2021.
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- S. Agarwal and H. Farid. Photo Forensics from Rounding Artifacts, *ACM Workshop on Information Hiding and Multimedia Security*, Denver CO, 2020.
- S. Agarwal, H. Farid, Y. Gu, M. He, K. Nagano, and H. Li. Protecting World Leaders Against Deep Fakes, *Workshop on Media Forensics at CVPR*, Long Beach, CA, 2019.
- E. A. AlBadawy, S. Lyu, and H. Farid. Detecting AI-Synthesized Speech Using Bispectral Analysis. *Workshop on Media Forensics at CVPR*, Long Beach, CA, 2019.
- P. Singh and H. Farid. Robust Homomorphic Image Hashing. *Workshop on Media Forensics at CVPR*, Long Beach, CA, 2019.
- B. Lorch, S. Agarwal, and H. Farid. Forensic Reconstruction of Severely Degraded License Plates. *IS&T Electronic Imaging*, San Francisco, CA, 2019.
- W. Fan, S. Agarwal, and H. Farid. Rebroadcast Attacks: Defenses, Reattacks, and Redefenses. *European Signal Processing Conference*, Rome, Italy, 2018.
- S. Agarwal, W. Fan, and H. Farid. A Diverse Large-Scale Dataset for Evaluating Rebroadcast Attacks. *IEEE International Conference on Acoustics, Speech and Signal Processing*, Calgary, Alberta, Canada, 2018.
- S. Agarwal and H. Farid. Photo Forensics from JPEG Dimples. *IEEE Workshop on Image Forensics and Security*, Rennes, France, 2017.
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- V. Conotter, E. Bodnari, G. Boato, and H. Farid. Physiologically-based Detection of Computer Generated Faces in Video. *International Conference on Image Processing*, Paris, France, 2014.
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- V. Conotter, G. Boato and H. Farid. Detecting Photo Manipulation on Signs and Billboards. *International Conference on Image Processing*, Hong Kong, 2010.
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J.E. Dobson, J.B. Woodward, S.A. Schwarz, J.C. Marchesini, H. Farid, and S.W. Smith. The Dartmouth Green Grid. *Workshop on High Performance Computing in Academia (in conjunction with International Conference on Computational Science)*, Atlanta, GA, 2005.

M.K. Johnson, S. Lyu and H. Farid. Steganalysis in Recorded Speech. *SPIE Symposium on Electronic Imaging*, San Jose, CA, 2005.

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J. Ford, H. Farid, F. Makedon, L.A. Flashman, T.W. McAllister, V. Megalooikonomou, and A.J.



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 Halting the Hate, *The Economist*, 6.23.16  
 New Technology Fights Online Extremism, *Morning Joe*, 6.23.16  
 A Tool to Delete Beheading Videos Before They Even Appear Online, *The Atlantic*, 6.22.16  
 New Tool to Take Down Terrorism Images Online Spurs Debate, *Washington Post*, 6.21.16  
 How Tech Can be Used to Track Terrorists, *Risk & Reward*, 12.12.15  
 Why Anti-Terror Technology Has Its Limits, *NPR, Weekend Edition*, 12.12.15  
 Was Controversial Lee Harvey Oswald Photo Faked?, *BBC Radio*, 10.21.15  
 Verdict is in on Whether Lee Harvey Oswald Photo is a Fake, *USA Today*, 10.20.15  
 Fake Photos on *All Sides with Ann Fisher*, 8.27.13  
 Software That Exposes Faked Photos, *New York Times*, 8.19.13  
 Crowdsourcing the Boston Marathon Investigation, *NPR, Here & Now*, 4.18.13  
 The Gaussian Blurred Line Of Photoshop In Advertising, *NPR, Colin McEnroe Show*, 1.16.13  
 Photo Retouching and Body Image, *CNN*, 8.12.12  
 From North Korea, an Altered Procession, *New York Times*, 12.28.11  
 Photo Retouching on *BBC World Service*, 12.20.11  
 New Technology to Catch Photoshop Fakes on *Marketplace*, 12.19.11  
 Exposing Digitally Doctored Photos in *Boston Globe*, 12.5.11  
 Retouching Reality in *TIME Magazine*, 11.30.11  
 They Aren't That Thin - Digital Retouching Gets Graded in *NPR, The Two-Way*, 11.30.11  
 Computer Model Spots Image Fraud in *Scientific American*, 11.29.11  
 The Secrets of Photoshop Unmasked, *The Independent*, 11.29.11  
 Software Reveals How Much Photos Have Been Retouched, *The Guardian*, 11.29.11  
 Photoshopped or Not? A Tool to Tell, *New York Times*, 11.28.11  
 Digital Retouching: Physical Implausibility, *The Economist*, 11.28.11  
 Altered-image Ratings Tell You Just How Fake Photos Are, *New Scientist*, 11.28.11  
 Facebook's New Way to Combat Child Pornography, *New York Times*, 5.19.11  
 Automating the Hunt for Child Pornographers, *New Scientist*, 4.6.11  
 Detecting Fake Photos with Digital Detective Work, *Columbia Journalism Review*, 3.23.11  
 Hany Farid vs. Photoshop, *Business Week*, 12.20.10  
 Airbrush Alert: UK Wants to Keep Fashion Ads Real *Associated Press*, 9.20.10  
 Can You Believe Your Eyes the Digital World?, *BBC News*, 8.2.10  
 The Technology Behind Spying, *NPR, All Things Considered*, 7.1.10  
 Child Porn Too Big For Law Enforcement?, *The Christian Science Monitor*, 6.13.10  
 How to Spot a Doctored Photo, *Wired*, 5.5.10  
 High Tech Child Porn Tracker, *NHPR, Word of Mouth*, 12.21.09  
 Dartmouth Scientist Says Oswald Rifle Photo Real, *Vermont Public Radio*, 11.24.09  
 Is That Picture Real?, *NH Chronicle*, 11.23.09  
 Can You Believe Your Eyes?, *New York Times, Upfront*, 11.23.09  
 Dartmouth Scientist Says Oswald Rifle Photo Real, *Associated Press*, 11.5.09  
 Professor: Photoshopping Person's Race Common, *NPR, All Things Considered*, 8.28.09  
 Faked Photographs: Look, and Then Look Again *New York Times*, 8.23.09  
 Photoshop Detective. *Studio 360*, 12.26.08  
 Real? Or Photoshopped? 'Airbrushing' Run Amok in *ABC News*, 12.19.08  
 The Digital Detective, *San Jose Mercury News*, 12.14.08  
 Photos as Weapons, *New York Times*, 8.11.08  
 In A Photoshop Age, Can You Believe Your Eyes?, *NPR, Talk of the Nation*, 7.23.08  
 Iran Doctors Missile of Photo Launch, *CNN*, 7.11.08  
 Detecting Digital Alterations in Media, *Vermont Public Radio*, 7.2.08  
 Profile: Hany Farid, *NOVA, Science Now*, 6.25.08  
 Tampered Photos, *PRI, The World*, 6.3.08  
 Journals Find Fakery in Many Images, *Chronicle of Higher Education*, 5.29.08  
 Digital Detectives, *NHPR, Word of Mouth*, 5.15.08  
 Identifying Manipulated Images, *MIT Technology Review*, 3.16.08  
 Researchers Look to Spot Photo Hoaxes, *The Associated Press*, 2.25.08  
 Photo Tech Complicates Child-Porn Cases, *The Associated Press*, 2.25.08  
 An End to Picture Perfect Frauds, *Discovery Channel Magazine*, 2.1.08  
 How Can You Tell if a Picture is Real?, *The Today Show*, 12.21.07

Digital Forensics, *BBC, Night Waves*, 10.17.07  
 Proving That Seeing Shouldn't Always Be Believing, *New York Times*, 10.2.07  
 Digital Detectives Discern Photoshop Fakery, *The Christian Science Monitor*, 8.29.07  
 Distorted Picture, *American Journalism Review*, 7.30.07  
 Magazines' Extreme Touch-ups, *The Today Show*, 7.23.07  
 Photo Tampering an Age-Old Practice, *The Chronicle of Higher Education*, 6.27.07  
 Great Shots That Never Happened, *Washington Post*, 4.15.07  
 Computing Photographic Forgeries, *Science News*, 3.17.07  
 Adobe Tackles Photo Forgeries, *Wired*, 3.8.07  
 Picture Imperfect, *Nature News*, 2.20.07  
 Science Fights the Fakes, *MSNBC*, 2.20.07  
 Surveillance: Video Evidence, *Newsweek International*, 1.15.07  
 Detecting Video Forgeries, *MIT Technology Review*, 11.29.06  
 Seeing is Believing?, *CBS News Sunday Morning*, 10.29.06  
 Digital Photo Manipulation, *BBC Digital Planet*, 9.4.06  
 Keeping It Real, *The Economist*, 8.17.06  
 Digital Art Authentication, *NPR, 1370 Connection*, 8.11.06  
 A Digital Life, *CNN*, 2.2.06  
 Should Journals Police Scientific Fraud?, *Nature News*, 2.2.06  
 Image Check for Scientific Journals, *Der Spiegel*, 1.30.06  
 It May Look Authentic; Here's How to Tell It Isn't, *New York Times*, 1.24.06  
 Technology Seen Abetting Manipulation of Research, *Boston Globe*, 1.10.06  
 Can Photos be Trusted, *Popular Science*, 9.1.05  
 Spotting a Digital Hoax, *The Discovery Channel*, 3.16.05  
 In The Photoshop Era, It's Harder To Trust Your Eyes, *USA Today*, 2.2.05  
 Seeing is No Longer Believing, *The Christian Science Monitor*, 2.2.05  
 Professors Who Are Changing the World, *New Hampshire Magazine*, 2.1.05  
 Photoshop Sleuths, *MIT Technology Review*, 1.17.05  
 Art Forgeries (with John Myatt), *BBC World Service*, 12.15.04  
 Digital Forensics, *NHPR, Front Porch*, 12.14.04  
 Debunking Photoshop Fakery, *New York Times (Year in Ideas)*, 12.12.04  
 Is It Real or Is It Photoshopped, *Discover Magazine*, 9.27.04  
 Doctored Digital Images, *NPR, Future Tense*, 7.27.04  
 A New Flavor of Digital Truth Serum, *New York Times*, 7.22.04  
 Is Seeing Believing, *BBC News*, 9.8.03  
 History Undercover with Arthur Kent: Cyberterrorism, *The History Channel*, 7.26.03  
 Mapping with Math, *BBC News*, 12.3.02  
 Digital Tours of Murals, *The Chronicle of Higher Education*, 7.9.02  
 Hidden Messages, *WCAX TV News*, 10.19.01  
 Statistics Sniff Out Secrets appearing in *Technology Research News*, 9.26.01

#### INVITED TALKS

Creating, (Mis)using, and Detecting Deep Fakes, *Indiana University, Bloomington* 3.24  
 Generative AI (Deepfakes), *Google*, 1.24  
 Creating, (Mis)using, and Detecting Deep Fakes, *Google Safer Summit (keynote)* 10.23  
 Creating, (Mis)using, and Detecting Deep Fakes, *Vision Sciences Society (keynote)*, 5.23  
 Creating, Weaponizing, and Detecting Deepfakes, *UC Santa Barbara*, 4.23  
 Combating Deep Fakes, *IEEE Biometrics Council*, 10.22  
 Disrupting Disinformation and Deep Fakes, *Science at Cal*, 8.22  
 Disrupting Disinformation, *Workshop on Disinformation at ICML (keynote)*, 7.22  
 Deep Fakes, *U.S. State Department*, 7.22  
 Creating, Using, Misusing and Detecting Deep Fakes, *Dartmouth College*, 6.22  
 Detecting Deep Fakes, *USAID*, 4.22  
 Assessing the Reliability of Photographic Forensic Identification, *Federal Judicial Center*, 9.21  
 The Weaponization of Deep Fakes, *CASIS West Coast Security Conference*, 8.21  
 Creating, Weaponizing, and Detecting Deep Fakes, *SIGGRAPH (keynote)*, 8.21  
 Creating, Weaponizing, and Detecting Deep Fakes, *University of Campinas, Brazil*, 6.21  
 The Accuracy, Fairness, and Limits of Predicting Recidivism, *UC Santa Barbara*, 4.21  
 Trust and Truth in the Age of Deep Fakes, *Notre Dame University*, 4.21  
 Trust and Truth in the Age of Deep Fakes, *Penn State University*, 4.21  
 Photographic Forensic Identification, *Stanford University*, 3.21  
 Creating, Weaponizing, and Detecting Deep Fakes, *Georgia Institute of Technology*, 3.21  
 Photographic Forensic Identification, *University of Wisconsin, Madison*, 2.21

Photographic Forensic Identification, *York University*, 2.21  
 Creating, Weaponizing, and Detecting Deep Fakes, *IS&T Symposium on Electronic Imaging*, 1.21  
 The Accuracy, Fairness, and Limits of Predicting Recidivism, *George Mason University*, 1.21  
 Creating, Weaponizing, and Detecting Deep Fakes, *Massachusetts Institute of Technology*, 12.20  
 Creating, Weaponizing, and Detecting Deep Fakes, *CASIS West Coast Security Conference*, 11.20  
 Creating, Weaponizing, and Detecting Deep Fakes, *Santa Fe Council on International Relations*, 11.20  
 The Accuracy, Fairness, and Limits of Predicting Recidivism, *Spark + AI Summit (keynote)*, 11.20  
 The Accuracy, Fairness, and Limits of Predicting Recidivism, *Carnegie Mellon University*, 11.20  
 Assessing the Reliability of Clothing-Based Forensic Identification, *DiMACS Workshop on Co-Development of Computer Science and Law*, 11.20  
 Creating, Weaponizing, and Detecting Deep Fakes, *CyberSec&AI (keynote)*, 10.20  
 Creating, Weaponizing, and Detecting Deep Fakes, *International Joint Conference on Biometrics (keynote)*, 9.20  
 Creating, Weaponizing, and Detecting Deep Fakes, *Spark + AI Summit (keynote)*, 6.20  
 Digital Forensics: Beyond real or fake, *Workshop on Media Forensics at CVPR (keynote)*, 6.20  
 Detecting Deep-Fake Videos from Appearance and Behavior, *Workshop on Fair, Data Efficient and Trusted Computer Vision at CVPR (keynote)*, 6.20  
 Detecting Deep-Fake Videos from Appearance and Behavior, *Deep Learning and Security Workshop at IEEE Symposium on Security and Privacy (keynote)*, 5.20  
 Digital Forensics: From photoshop to deepfakes, *UNC Chapel Hill*, 2.20  
 Photo Forensics from Rounding Artifacts, *Computational Imaging Workshop (keynote)*, 2.20  
 Digital Image and Video Forensics, *California Judges Association*, 10.19  
 Creating, Weaponizing, and Detecting Deep Fakes, *University of Maryland*, 10.19  
 Photo Forensics, *Amazon*. 8.19  
 Creating, Weaponizing, and Detecting Deep Fakes, *USENIX (keynote)*, 8.19  
 Creating, Weaponizing, and Detecting Deep Fakes, *San Francisco Electronic Crimes Task Force*, 7.19  
 Creation, Weaponization, and Detection of Deep Fakes, *D.C. Circuit Judicial Conference*, 6.19  
 Digital Forensics: past, present, and future, *AI Foundation*, 6.19  
 Digital Forensics: past, present, and future, *Workshop on Media Forensics at CVPR (keynote)*, 6.19  
 Protecting Children Online, *Missing & Exploited Children Training Conference*, 5.19  
 Detecting Deep Fakes, *IEEE International Workshop on Fake Multimedia (keynote)*, 3.19  
 Fake Photos, *University of Florida*, 3.19  
 Digital Forensics, *Google*, 3.19  
 Digital Forensics, *Yahoo Research*, 12.18  
 Photo Forensics from JPEG Coding Artifacts, *Stanford University*, 11.18  
 Reining in Online Abuses, *University of California, Santa Barbara*, 10.18  
 How Realistic is Photorealistic?, *University of California, Berkeley*, 10.18  
 Digital Forensics, *SIGGRAPH Workshop on Truth in Images, Videos, and Graphics*, 8.18  
 The Danger of Predictive Algorithms in Criminal Justice, *TEDx AmoskeagMillyard*, 6.18  
 Reining in Online Abuses, *Plymouth State University*, 3.18  
 Photo Forensics, *University of Pennsylvania*, 12.17  
 Reining in Online Abuses, *Building Alliances - Preventing Terror*, Brussels Belgium, 10.17  
 Reining in Online Abuses, *SUNY Albany, Massry Lecture*, 9.17  
 Photo Forensics, *University of California, Berkeley*, 9.17  
 Reining in Online Abuses, *University of California, Berkeley*, 9.17  
 Photographs, Hoaxes, and Conspiracies, *Gordon Conference: Visualization in Science*, 7.17  
 Photo Forensics from JPEG Coding Artifacts, *Media Forensics Workshop at CVPR (keynote)*, 7.17  
 Digital Video Forensics, *The Federal Judiciary Center*, 6.17  
 Reining in Online Abuses, *Williams College*, 5.17  
 Photo Forensics, *Williams College*, 5.17  
 Digital Image Forensics, *Office of Research Integrity*, 4.17  
 Digital Forensics: From Social Media to Social Impact, *National Academy of Inventors*, 4.17  
 Reining in Online Abuses, *Council of Engineering Systems Universities*, 3.17  
 Photo Forensics, *International Center of Photography*, 12.16  
 Photo Forensics, *Columbia University*, 12.16  
 Combating On-line Extremism, *United Nations*, 11.16  
 Photo Forensics from Lighting and Shadows, *Duke University*, 3.16  
 How Realistic is Photorealistic?, *Duke University*, 3.16  
 Photo Forensics, *Middlebury College*, 10.15  
 Photo Forensics and Verification, *TechRaking at MIT*, 9.15  
 Photo Forensics, *University of Wisconsin, Madison*, 4.15  
 Photo Forensics from Shadows & Shading, *SPIE Media Security, and Forensics (keynote)*, 1.14

Photo Forensics, *University of Oregon*, 1.14  
 Photo Forensics, *University of California, Riverside*, 1.14  
 Photo Forensics, *University of Delaware*, 9.13  
 Photo Forensics, *International Conference on Computational Photography* (keynote), 4.13  
 Image Manipulation in News, *Computation + Journalism Symposium*, 2.13  
 Digital Forensics, *The World Bank*, 6.12  
 Photo Retouching, *Information Hiding* (keynote), 5.12  
 Photo Forensics, *Stanford University*, 1.12  
 Ethics and Forensics in the Age of Photoshop Photojournalism, *MIT*, 4.11  
 Photo Forensics, *National Geographic*, 1.11  
 Photo Forensics: Lighting and Shadows, *Harvard University*, 9.10  
 Photo Forensics, *Applied Perception in Graphics & Visualization* (keynote), 7.10  
 Limitations of Visually-Based Image Forensics, *Massachusetts Institute of Technology*, 4.10  
 Photo Forensics, *Massachusetts Institute of Technology*, 4.10  
 Digital Image Forensics, *Yale University*, 4.10  
 Digital Image Forensics, *IDGA Biometrics for National Security and Defense*, 3.10  
 Visually-Based Image Forensics, *IDGA Biometrics for National Security and Defense*, 3.10  
 Photo Forensics, *Smith-Kettlewell Eye Research Institute*, 2.10  
 Digital Image Forensics, *Adobe Inc*, 1.10  
 Digital Image Forensics, *University of Rochester*, 11.09  
 On the Limitations of Visually-Based Image Forensics, *University of Rochester*, 11.09  
 Photo Forensics, *Brown University*, 10.09  
 Digital Forensics, *Biometrics: Theory, Applications and Systems* (keynote), 9.09  
 Digital Tampering and Forensics, *University of California, San Diego*, 4.09  
 Image Forensics, *University of California, Berkeley*, 3.09  
 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, *University 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 University, 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 Albany*, 11.95  
 3-D Scene Reconstruction for Telepresence, *UNC, Chapel Hill*, 6.94

AWARDS	National Academy of Inventors (NAI), Fellow, 2016 John Simon Guggenheim Fellowship, 2006 Alfred P. Sloan Fellowship, 2002
PROFESSIONAL ACTIVITIES	IEEE Fellow, 2018 Phi Beta Kappa (honorary), 2017
EDITORIAL BOARD	Journal of Online Trust and Safety, 2021-present
ASSOCIATE EDITOR	Annual Review of Vision Science, 2019-present IEEE Transactions on Information Forensics and Security, 2005-2008

PROGRAM COMMITTEE	<p>Workshop on Image Forensics, CVPR, 2017-2022          IEEE Workshop on Image Forensics (WIFS), 2017, 2019          International Conference on Computational Photography, 2012-2015, 2021          Information Hiding, 2010          Media Security and Forensics (Electronic Imaging), 2009-2011          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</p>
REVIEWER	<p>NSF review panel (SBIR/STTR Phase I), 2018          NSF review panel (RI Small), 2013          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 Transactions on Information Security and Forensics, 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</p>
CURRENT STUDENTS	<p>Sarah Barrington, Ph.D. advisor          Justin Norman, Ph.D. advisor</p>
FORMER STUDENTS	<p>Shruti Agarwal (2022), Ph.D. advisor          Tiago Carvalho (2014), visiting Ph.D. student (UNICAMP, Brazil)          Emma Chiu '19, research advisor          Valentina Conotter (2011), Ph.D. co-advisor (University of Trento)          Julia Dressel '17, senior thesis advisor          Marc Faddoul (2019), M.S. advisor          Wei Fan (2018), postdoctoral advisor          Olivia Holmes '15, senior thesis advisor          Daniel Hopkins '10, research advisor          Kimo Johnson (2007), Ph.D. advisor          Eric Kee (2013), Ph.D. advisor          Simran Kaur, (2021), Haas Scholar, (UC Berkeley)          Jethro Rothe-Kushel '03, research advisor          Benedikt Lorch (2018), visiting M.S. student (University of Erlangen)          Siwei Lyu (2005), Ph.D. advisor          Brandon Mader '16, research advisor          David Martin '00, senior thesis advisor          Kiley McEvoy '06, research advisor          Sophie Nightingale (2020), postdoctoral advisor          Joseph Pechter '04, senior thesis advisor          William Pechter '04, senior thesis advisor          Senthil Periaswamy (2003), Ph.D. advisor          Coralie Phanord '16, research advisor          Andrew Pierce '02, research advisor          Alin Popescu (2005), Ph.D. advisor          Nelson Rosa '06, research advisor          Katherine Sherwin '01, research advisor          Priyanka Singh (2019), postdoctoral advisor          Hai Sun (2004), Ph.D. co-advisor          Sydney Topper '18, research advisor          Joshua Wang '15, thesis advisor</p>

Weihong Wang (2009), Ph.D. advisor  
Angela Zhu '17, research advisor

TEACHING  
(BERKELEY)

Introduction to Data Structures and Analytics, INFO 206B, Fall 2023  
Introduction to Programming and Computation, INFO 206A, Fall 2023  
Structure and Interpretation of Computer Programs, CS61A, Spring 2023  
Computer Vision, INFO 290, Fall 2022  
Computer Vision, DATASCI 281, Spring 2021  
Structure and Interpretation of Computer Programs, CS61A, Fall 2020  
Introduction to Programming and Computation, INFO 206A, Fall 2020  
Introduction to Data Structures and Analytics, INFO 206B, Fall 2020  
Introduction to Programming and Computation, INFO 206A, Fall 2019  
Introduction to Data Structures and Analytics, INFO 206B, Fall 2019

TEACHING  
(DARTMOUTH)

Foundations of Applied Computer Science, CS 11, Spring 2018  
Data Structures and Analytics, Tuck School of Business, Spring 2017  
Fundamentals of Web Programming, Tuck School of Business, Spring 2017  
Introduction to Programming and Computation, CS 1, Fall 2016  
Fundamentals of Web Programming, Tuck School of Business, Spring 2016  
Numerical and Computational Tools for Applied Science, CS 70/170, Spring 2016  
Introduction to Programming and Computation, CS 1, Fall 2015  
Numerical and Computational Tools for Applied Science, CS 70/170, Spring 2015  
Introduction to Programming and Computation, CS 1, Fall 2014  
Introduction to Programming and Computation, CS 1, Spring 2014  
Introduction to Programming and Computation, CS 1, Spring 2013  
Digital Image Forensics, CS 89/189, Spring 2013  
Digital Forensics, University of Trento, Italy, Spring 2011  
Numerical and Computational Tools for Applied Science, CS 36/136, Summer 2008  
Concepts in Computing, CS 4, Summer 2008  
Numerical and Computational Tools for Applied Science, CS 36/136, Summer 2007  
Concepts in Computing, CS 4, Summer 2007  
Concepts in Computing, CS 4, Winter 2006  
Numerical Methods in Computer Vision, CS 88/188, Fall 2004  
Concepts in Computing, CS 4, Summer 2003  
Concepts in Computing, CS 4, Summer 2002  
Data Structures and Programming, CS 15, Winter 2002  
Data Structures and Programming, CS 15, Fall 2001  
Numerical Linear Algebra, CS106, Spring 2001  
Data Structures and Programming, CS 15, Winter 2001  
Data Structures and Programming, CS 15, Fall 2000  
Fundamentals of Image Processing, CS 88/188, Spring 2000  
Programming Languages, CS 68, Winter 2000  
Data Structures and Programming, CS 15, Fall 1999

TESTIMONY

California State Assembly (understanding AI), 2.28.24  
Senate Judiciary Subcommittee on Privacy, Technology, and the Law, (platform accountability: Gonzalez and Reform), 3.8.23  
California State Assembly, (protecting kids online), 3.29.22  
Australian Parliament, Select Committee on Social Media and Online Safety, 1.29.22  
Illinois General Assembly (manipulated digital media), 8.26.21  
U.S. House Energy & Commerce (section 230 reform), 3.15.21  
U.S. House Energy & Commerce (how disinformation is dividing the nation), 6.24.20  
U.S. House Energy & Commerce (Fostering a healthier internet to protect consumers), 10.16.19  
U.S. House Committee on Science, Space, & Technology (online imposters and disinformation), 9.24.19  
European Parliament Special Committee on Terrorism, 4.24.18  
Singapore Select Committee on Deliberate Online Falsehoods, 3.27.18  
U.S. Senate Judiciary, 9.3.17 (on-line extremism)  
United Nations Counter-Terrorism Committee Executive Directorate, 11.30.16

EXPERT WITNESS  
TESTIMONY

U.S. v. Gunnery Sergeant Louis A. Lockard III, USMC, 2023

SAIC v. United States et al., U.S. Court of Federal Claims, 2022  
Qualcomm Inc. v. Apple Inc., U.S. International Trade Commission, 2018  
Qualcomm Inc. v. Apple Inc., U.S. District Court of Southern District of California, 2018  
Lanutti v. Children's Hospital of Pennsylvania, Philadelphia, Pennsylvania, 2018  
Salenger v. Inergy, 2017  
United States of America v. Sweeney, 2016  
Adobe v. Everyscape, Boston, Massachusetts, 2015  
Hargett v. Frost, Indianapolis, Indiana, 2014 (deposition)  
Ceglia v. Zuckerberg, 2012, (deposition)  
United States of America v. Paul Burdulis, Worcester, Massachusetts, 2012  
Garza, et al. v. Allied Chemical Corporation, et al., Hidalgo County, Texas, 2009  
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Pack v. Ross, et al, Nashville, Tennessee, 2009  
State of New Hampshire. v. Katherine Johnson, 2009  
DesertMicro v. Piersall, Jacksonville, Florida, 2007  
State of Florida v. Michael Quattrocchi, 2007  
State of Maine v. Melvin Logan, 2007  
United States of America v. San Diego Gas & Electric Company, et al., 2007  
State of Ohio v. David Harrison, 2006  
State of New Hampshire v. John Lacroix, 2005  
Graphic Security Systems v. Nautilus Security, 2005  
State of Ohio v. Mark A. Heilman, 2004