

Matthew C. Stamm

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EDUCATION

- Ph.D. Electrical Engineering** 2012
University of Maryland, College Park
Thesis: Digital Multimedia Forensics and Anti-Forensics
Advisor: K. J. Ray Liu
- M.S. Electrical Engineering** 2011
University of Maryland, College Park
Advisor: K. J. Ray Liu
- B.S. Electrical Engineering** 2004
University of Maryland, College Park
University Honors

PROFESSIONAL EXPERIENCE

- Assistant Professor** August 2013 – Present
Department of Electrical and Computer Engineering
Drexel University, Philadelphia, PA
- Co-Instructor** June 2013 – July 2013
Cybersecurity Leadership Program
Robert H. Smith School of Business
University of Maryland, College Park, MD
- Post-Doctoral Research Associate** June 2012 – May 2013
Department of Electrical and Computer Engineering
University of Maryland, College Park, MD
Supervisor: K. J. Ray Liu
- Graduate Research Assistant** May 2008 – May 2012,
May 2007 – August 2007
Department of Electrical and Computer Engineering
University of Maryland, College Park, MD
Supervisor: K. J. Ray Liu
- Graduate Teaching Assistant** September 2005 – May 2008
Department of Electrical and Computer Engineering
University of Maryland, College Park, MD

AWARDS AND FELLOWSHIPS

- **Drexel College of Engineering Outstanding Early-Career Research Achievement Award** (2017) - Awarded annually to one assistant professor within Drexel University's College of Engineering for outstanding research accomplishments.
- **NSF CAREER Award** (2016) - Awarded for the proposal "CAREER: Scaling Multimedia Forensic Algorithms for Big Data and Adversarial Environments"
- **Dean's Doctoral Dissertation Award** (2012) - Awarded annually to one graduating doctoral student in the A. James Clark School of Engineering at the University of Maryland for outstanding doctoral research.
- **Ann G. Wylie Dissertation Fellowship** (2011) - Awarded annually to 40 outstanding doctoral students throughout the entire University of Maryland in the final stages of their dissertation.
- **Future Faculty Fellowship** (2010) - Awarded annually by the A. James Clark School of Engineering to twenty Ph.D. students who show potential towards earning a faculty position at a major research university.
- **Distinguished Teaching Assistant Award** (2006) - Awarded by the Department of Electrical and Computer Engineering at the University of Maryland, College Park.

TEACHING EXPERIENCE

Drexel University *Assistant Professor*

- Winter 17-18 ECES 435: Recent Advances in Digital Signal Processing - Multimedia Signal Processing and Information Security (Enrollment: 28 students)
- Spring 16-17 ECES 301: Transform Methods and Filtering (Enrollment: 44 students)
- Winter 16-17 ECES T680: Forensic Signal Processing (Enrollment: 10 students)
- Fall 16-17 ECES 301: Transform Methods and Filtering (Enrollment: 68 students)
- Spring 15-16 ECES 301: Transform Methods and Filtering (Enrollment: 74 students)
- Winter 15-16 ECES T680: Forensic Signal Processing (Enrollment: 42 students)
- Fall 15-16 ECES 301: Transform Methods and Filtering (Enrollment: 85 students)
- Spring 14-15 ECES 301: Transform Methods and Filtering (Enrollment: 84 students)

- Winter 14-15 ECES 690: Forensic Signal Processing (Enrollment: 27 students)
 ECES 435: Recent Advances in Digital Signal Processing - Multimedia Signal Processing and Information Security (Enrollment: 15 students)
- Fall 14-15 ECES 301: Transform Methods and Filtering (Enrollment: 82 students)
- Spring 13-14 ECES 302: Transform Methods and Filtering (Enrollment: 84 students)
- Winter 13-14 ECES 435: Recent Advances in Digital Signal Processing - Multimedia Signal Processing and Information Security (Enrollment: 13 students)
- Fall 13-14 ECES 302: Transform Methods and Filtering (Enrollment: 83 students)

University of Maryland, College Park

Co-Instructor, Cybersecurity Leadership Program

Summer 13 Cybersecurity Leadership Capstone

Co-Instructor (One-Third Workload), Department of Electrical and Computer Engineering

Spring 11 ENEE 324: Engineering Probability

INVITED TALKS

- *Image Forgery Detection and Falsification Using Deep Learning*, Presented at meeting organized by WITNESS (human rights organization) & Harvard's Shorenstein Center to discuss malicious uses of Deepfakes and other AI-generated synthetic media, June 2018.
- *Multimedia Forensics: Using Mathematics and Machine Learning to Detect Image Forgeries*, Presented at Rowan University, April 2017.
- *Multimedia Forensics*, Presented at the Drexel Cybersecurity Symposium, November 2016.
- *Multimedia Forensics: Using Mathematics and Machine Learning to Determine an Image's Source and Authenticity*, Presented as an NSA Center of Academic Excellence Tech Talk, October 2016.
- *High Performance Techniques to Identify the Source of Digital Images Using Multimedia Forensics*, Presented to the Defense Forensics and Biometrics Agency (DFBA), Program Closeout Meeting, August 2016.
- *High Performance Techniques to Identify the Source of Digital Images Using Multimedia Forensics*, Presented to the Defense Forensics and Biometrics Agency (DFBA), Program Review Meeting, March 2016
- *High Performance Techniques to Identify the Source of Digital Images Using Multimedia Forensics*, Presented to the Defense Forensics and Biometrics Agency (DFBA), Program Review Meeting, August 2015.

- *Digital Multimedia Forensics and Anti-Forensics*, Presented to the IEEE Philadelphia Section, October 2014.
- *Information Forensics*, Presented at the West Philadelphia Science Showcase as part of the Philadelphia Science Festival, April 2014.
- *Digital Multimedia Forensics and Anti-Forensics*, Presented to the National Media Exploitation Center (NMEC), April 2014.
- *Digital Multimedia Forensics and Anti-Forensics*, Presented to the Defense Forensics and Biometrics Agency (DFBA), February 2014.
- *Digital Multimedia Forensics and Anti-Forensics*, Presented to the National Institute of Standards and Technology (NIST), March 2013.

UNIVERSITY AND DEPARTMENTAL SERVICE

- *College-Level Committee Membership*
 - ECE Department Head Search Committee, 2017 - 2018
 - MS in Cybersecurity Degree Revision Committee, 2017 - Present
- *Departmental Committee Membership*
 - Planning and Development Committee, 2017 - Present
 - Assessment and Accreditation Committee, 2015 - Present
 - Machine Learning Curricular Revision Committee, 2014 - 2015
- *Ph.D. Qualifying Examination Committee Member* (Total: 17, Chair: 2)
 - Chenxi Li (Adv. Cohen) - June 18, 2018
 - Oday Bshara (Adv. Dandekar) - April 19, 2018
 - Zhengqiao Zhao (Adv. Rosen) - September 7, 2017
 - Yirui Liu (Adv. Walsh) - June 11, 2017
 - Xinwei Zhao (Adv. Stamm) - June 1, 2017
 - Chen Chen (Adv. Adv. Stamm) - May 31, 2107
 - Owen Mayer (Adv. Stamm) - May 1, 2017
 - Belhassen Bayar (Adv. Stamm) - April 25, 2017
 - Kyle Juretus (Adv. Savidis) - June 15, 2016
 - Stephen Woloszynek (Adv. Rosen) - September 29, 2015
 - Jonathan Stokes (Adv. Weber) - September 16, 2015
 - Yitian Shao (Adv. Visell) - May 27, 2015
 - Solmaz Torabi (Adv. Walsh) - January 13, 2015
 - Pingge Jiang (Adv. Shackelford) - September 23, 2014 (**Chair**)

- Ni An (Adv. Weber) - September 22, 2014
 - Arjun Rajasekar (Adv. Hrebien & Kam) - July 2, 2014 (**Chair**)
 - Michael Caro (Adv. Kim) - December 4, 2013
- *Ph.D. Thesis Proposal Committee Member* (Total: 15, Chair: 4)
 - Owen Mayer (Adv. Stamm) - July 18, 2018
 - Ni An (Adv. Weber) - December 4, 2017 (**Chair**)
 - Pingge Jiang (Adv. Shackelford) - November 9, 2017 (**Chair**)
 - Stephen Woloszynek (Adv. Rosen) - December 1, 2017 (**Chair**)
 - Belhassen Bayar (Adv. Stamm) - July 11, 2017
 - Rajath Soans (Adv. Shackelford) - April 21, 2017 (**Chair**)
 - William Osei-Bonsu (Adv. Kandasamy, Co-Adv. Stamm) - February 15, 2017
 - Jie Ren (Adv. Walsh) - April 1, 2016
 - Marko Janko (Adv. Visell & Kam) - August 31, 2015
 - Tingshan Huang (Adv. Sethu & Kandasamy) - June 18, 2015
 - Brandon Morton (Adv. Kim) - June 4, 2015
 - Matthew Prockup (Adv. Kim) - January 22, 2015
 - Bradford Boyle (Adv. Weber) - August 13, 2014
 - Zexi Liu (Adv. F. Cohen) - May 20, 2014
 - Sayandeep Acharya (Adv. Kam) - January 16, 2014
- *Ph.D. Thesis Committee Member* (Total: 12, Chair: 4)
 - Belhassen Bayar (Adv. Stamm) - August 6, 2018
 - Pingge Jiang (Adv. Shackelford) - July 16, 2018 (**Chair**)
 - Stephen Woloszynek (Adv. Rosen) - May 29, 2018 (**Chair**)
 - Solmaz Torabi (Adv. Walsh) - May 14, 2018 (**Chair**)
 - Rajath Soans (Adv. Shackelford) - December 1, 2017 (**Chair**)
 - Marco Janko (Adv. Visell, Co-Adv. Kam, Acting Adv. Stamm) - September 12, 2017
 - Brandon Morton (Adv. Kim) - April 22, 2016
 - Matthew Prockup (Adv. Kim) - May 3, 2016
 - Bradford Boyle (Adv. Weber) - May 27, 2015
 - Donald Bucci (Adv. Kam) - February 13, 2015
 - Sayandeep Acharya (Adv. Kam) - November 7, 2014
 - Zexi Liu (Adv. F. Cohen) - September 24, 2014
- *M.S. Thesis Defense Committees* (Total: 3, Chair: 2)
 - Jenna Schabdach - (Adv. Shackelford) - May 24, 2016 (**Chair**)

- Andrew Benton (Adv. Shackelford) - June 8, 2015 (**Chair**)
- Daniel Zalkind (Adv. Kam) - May 15, 2014
- *Other Departmental Service Activities*
 - Organized (with Gail Rosen) invited seminar by Dr. Min Wu, IEEE Signal Processing Society Distinguished Lecturer - October 18, 2016
 - Served as Judge for the 8th annual Drexel IEEE Graduate student Forum's Research Symposium - February 26, 2016
 - Developed a *Multimedia Forensics* session for the 2015 Drexel University Code Academy (DUCA) - A month-long program hosted by Drexel University for 25-30 high school juniors and seniors interested in computing
 - Prepared and delivered presentation to the Freshmen Design Revision Committee on freshman engineering design projects utilized at other universities and how they could be adopted at Drexel - November 10, 2016
 - Prepared and delivered presentation to the Senior Design Task Force on a Capstone Course alternative to the current Senior Design curriculum and how this is implemented at other universities - February 16, 2016
 - Volunteer at Spring 2015 ECE Department Open House - March 5, 2015
 - Volunteer at the 2014 ECE Department Accepted Students Day - April 5, 2014
 - Volunteer at Fall 2013 ECE Department. Open House - November 10, 2013
- *Research Demonstrations Presented on Behalf of the Drexel University ECE Department*
 - Created and administered two demonstrations for Drexel University's 2018 ECE Day - Feb 19, 2018
 - Created a demonstration for ECE Open House events (presented by Ph.D. students Xinwei Zhao and Chen Chen) - August 20, 2017
 - Created and administered two demonstrations for Drexel University's 2017 ECE Day - February 21, 2017
 - Created a demonstration to represent Drexel at the Colloquium for Information Security and Education (CISSE) - June 12, 2016
 - Created and administered two demonstrations for Drexel University's 2016 ECE Day - February 23, 2016
- *Speaker at the Following Events on Behalf of the Drexel University ECE Department*
 - Vanguard Innovation Team meeting as part of a session to build academic collaborations between Drexel and Vanguard - May 30, 2017
 - Drexel University's meeting with Xinli Gu, Senior Director of DFX Technology of Huawei North America Network Division - December 2, 2015
 - A. J. Drexel Cybersecurity Senior Advisory Board meeting - March 10, 2015
 - ECE Employer Circle meeting - April 2014
 - ECE Advisory Council meeting - October 4, 2013

PROFESSIONAL SERVICE ACTIVITIES

General Chair of the Following Conferences:

- 2017 ACM Workshop on Information Hiding and Multimedia Security - Philadelphia, PA

Professional Society Leadership Activities:

- Information Forensics and Security Technical Committee, IEEE Signal Processing Society
Elected Member (2018-2020 Term) - This committee oversees and organizes conferences, publications, awards, and educational activities related to information security, multimedia forensics, steganography, biometrics, cryptography, authentication, and other security related research.

Organizer of the Following International Competitions:

- 2018 IEEE Signal Processing Cup (*Lead Organizer*)
This competition, held annually by IEEE Signal Processing Society, challenges teams of undergraduate students from around the world to tackle real problems in signal processing and machine learning. The first round was run in conjunction with Kaggle and the final competition was held at the 2018 IEEE International Conference on Acoustics, Speech, and Signal Processing.

Editorial Board Membership

- IEEE SigPort

Special Session Organizer for the Following Conferences:

- 2018 European Signal Processing Conference (EUSIPCO)
 - Special Session on Adversarial Dynamics (Co-Organized with Benedetta Tondi and Mauro Barni)
- 2015 SPIE Electronic Imaging - Media Watermarking, Security, and Forensics
 - Special Session on Anti-Forensics (Co-Organized with H. Taha Sencar)

Invited Reviewer for the Following Research Journals

- IEEE Transactions on Image Processing
- IEEE Transactions on Information Forensics and Security
- IEEE Transactions on Circuits and Systems for Video Technology
- IEEE Transactions on Multimedia
- IEEE Journal of Selected Topics in Signal Processing
- IEEE Transactions on Cybernetics (B)
- IEEE Signal Processing Letters
- Journal of Visual Communication and Image Representation (Elsevier)
- Signal Processing (Elsevier)

- Information Sciences (Elsevier)
- Computers & Security (Elsevier)

Technical Program Committee Member for the Following Conferences

- IEEE International Conference on Image Processing (ICIP) – 2014, 2015, 2016, 2017, 2018
- IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP) – 2014, 2016, 2017, 2018
- IEEE Workshop on Information Forensics and Security (WIFS) – 2014, 2015, 2017, 2018
- ACM Workshop on Information Hiding & Multimedia Security (IH&MMSec) – 2017, 2018
- IEEE International Workshop on Multimedia Signal Processing (MMSP) – 2012

Reviewer or Subreviewer for the Following Conferences

- IEEE International Conference on Image Processing (ICIP) – 2008, 2009, 2010, 2012
- IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP) – 2011, 2012
- IEEE Workshop on Information Forensics and Security (WIFS) – 2013
- European Signal Processing Conference (EUSIPCO) – 2012
- International Information Hiding Conference – 2011
- International Workshop on Digital Watermarking (IWDW) – 2011

Reviewer for the Following NSF Programs

- Ad-hoc reviewer for Secure and Trustworthy Cyberspace (SaTC) - 2015

FUNDED PROPOSALS - \$2,404,514

- [1] M. C. Stamm (PI), J. Shackelford, and N. Kandasamy, “High performance techniques to identify the source and authenticity of digital videos using multimedia forensics,” *Army Research Office (ARO)*, July 1, 2017 – June 30, 2019,
Funded Amount: **\$648,572**.
- [2] S. Weber (PI), M. C. Stamm, and K. Dandekar, “Security by design: Drexel hands-on cybersecurity laboratory curriculum expansion,” *National Security Agency (NSA)*, October 1, 2017 – September 30, 2018,
Funded Amount: **\$255,429**.
- [3] M. C. Stamm (Drexel University PI), with M. Kozak (PI - PAR Government), B. Klare (Rank One Computing), C. Sisson (Rochester Institute of Technology), and J. Corso (University of Michigan), “Project MediSphere,” *Defense Advanced Research Projects Agency (DARPA) - MediFor Program*, May 2016 – February 2019,
Funded Amount: **\$541,996.84** (Amount Awarded to Stamm/Drexel).

- [4] M. C. Stamm (PI), “CAREER: Scaling multimedia forensic algorithms for big data and adversarial environments,” *National Science Foundation – Faculty Early Career Development Program (NSF CAREER)*, March 2016 – February 2021,
Funded Amount: **\$583,578**.
- [5] M. C. Stamm (PI) and N. Kandasamy, “High performance techniques to identify source of digital images using multimedia forensics,” *Defense Forensics & Biometrics Agency (DFBA) and Army Research Office (ARO)*, Feb. 1, 2015 – July 31, 2016,
Funded Amount: **\$374,939**.

CITATIONS

- Publications cited 1505 times, *h*-index of 18
- Citation information listed here and for individual publications retrieved via Google Scholar on August 15, 2018. Google Scholar profile available at the following url:
<https://scholar.google.com/citations?hl=en&user=UE1rg1IAAAAJ>

JOURNAL PUBLICATIONS

- [1] M. C. Stamm, P. Bestagini, L. Marcenaro, and P. Campisi, “Forensic camera model identification: Highlights from the iee signal processing cup 2018 student competition,” *IEEE Transactions on Information Forensics and Security*, Sep. 2018.
- [2] B. Bayar and M. C. Stamm, “Constrained convolutional neural networks: A new approach towards general purpose image manipulation detection,” *IEEE Transactions on Information Forensics and Security*, vol. 13, no. 11, pp. 2691–2706, Nov. 2018, [**#2 Most accessed article in IEEE TIFS during June 2018**]
Citations: 1.
- [3] O. Mayer and M. C. Stamm, “Accurate and efficient image forgery detection using lateral chromatic aberration,” *IEEE Transactions on Information Forensics and Security*, vol. 13, no. 7, pp. 1762–1777, Jul. 2018.
- [4] T. Huang, N. Kandasamy, H. Sethu, and M. C. Stamm, “An efficient strategy for online performance monitoring of datacenters via adaptive sampling,” *IEEE Transactions on Cloud Computing*, Accepted and published on IEEE Xplore in 2016, To appear in print,
Citations: 3.
- [5] X. Chu, Y. Chen, M. C. Stamm, and K. J. R. Liu, “Information theoretical limit of media forensics: The forensicability,” *IEEE Transactions on Information Forensics and Security*, vol. 11, no. 4, pp. 774–788, Apr. 2016,
Citations: 4.
- [6] X. Chu, M. C. Stamm, and K. J. R. Liu, “Compressive sensing forensics,” *IEEE Transactions on Information Forensics and Security*, vol. 10, no. 7, pp. 1416–1431, Jul. 2015,
Citations: 10.

- [7] X. Chu, M. C. Stamm, Y. Chen, and K. J. R. Liu, “On antiforensic concealability with rate-distortion tradeoff,” *IEEE Transactions on Image Processing*, vol. 24, no. 3, pp. 1087–1100, Mar. 2015,
Citations: 8.
- [8] X. Kang, M. C. Stamm, A. Peng, and K. J. R. Liu, “Robust median filtering forensics using an autoregressive model,” *IEEE Transactions on Information Forensics and Security*, vol. 8, no. 9, pp. 1456–1468, Sep. 2013,
Citations: 88.
- [9] M. C. Stamm, M. Wu, and K. J. R. Liu, “Information forensics: An overview of the first decade,” *IEEE Access*, vol. 1, pp. 167–200, 2013, [**Nominated for the IEEE Signal Processing Society Overview Paper Award**]
Citations: 157.
- [10] M. C. Stamm, W. S. Lin, and K. J. R. Liu, “Temporal forensics and anti-forensics for motion compensated video,” *IEEE Transactions on Information Forensics and Security*, vol. 7, no. 4, pp. 1315–1329, Aug. 2012,
Citations: 105.
- [11] M. C. Stamm and K. J. R. Liu, “Anti-forensics of digital image compression,” *IEEE Transactions on Information Forensics and Security*, vol. 6, no. 3, pp. 1050–1065, Sep. 2011,
Citations: 158.
- [12] M. C. Stamm and K. J. R. Liu, “Forensic detection of image manipulation using statistical intrinsic fingerprints,” *IEEE Transactions on Information Forensics and Security*, vol. 5, no. 3, pp. 492–506, Sep. 2010,
Citations: 221.

JOURNAL PUBLICATIONS UNDER REVIEW

- [1] B. Bayar and M. C. Stamm, “Accurate and robust source camera model identification via constrained convolutional neural networks,” *currently under review in IEEE Transactions on Information Forensics and Security*, submitted Jul. 2018.
- [2] S. DeCelles, B. Bayar, M. C. Stamm, and N. Kandasamy, “Data reduction, compressed sampling, and recovery for online performance monitoring,” *currently under review in IEEE Transactions on Network Service Management*, submitted Jul. 2018.

JOURNAL PUBLICATIONS ACTIVELY IN PREP

- [1] O. Mayer and M. C. Stamm, “Deep learning based forensic similarity for digital images,” *in preparation for submission to IEEE Transactions on Information Forensics and Security*, to be submitted Aug. 2018.

- [2] C. Chen and M. C. Stamm, “Camera model identification framework using an ensemble of demosaicing features,” *in preparation for submission to IEEE Transactions on Information Forensics and Security*, to be submitted Aug. 2018.
- [3] X. Zhao, C. Chen, and M. C. Stamm, “Anti-forensically falsifying an image’s processing history using a generative adversarial network,” *in preparation for submission to IEEE Transactions on Information Forensics and Security*, to be submitted Aug. 2018.
- [4] B. Hosler and M. C. Stamm, “Forensic identification of an image’s source social network,” *in preparation for submission to IEEE Signal Processing Letters*, to be submitted Aug. / Sep. 2018.
- [5] X. Zhao, C. Chen, and M. C. Stamm, “A generative adversarial network based attack to falsify an image’s source camera model,” *in preparation for submission to IEEE Transactions on Information Forensics and Security*, to be submitted Aug. / Sep. 2018.
- [6] L. Bondi, P. Bestagini, S. Tubaro, and M. C. Stamm, “A new approach for performing falsified image region identification and localization using deep forensic feature inconsistencies,” *in preparation for submission to IEEE Transactions on Information Forensics and Security*, to be submitted Oct. 2018.

CONFERENCE PUBLICATIONS (PEER REVIEWED)

- [1] C. Chen, X. Zhao, and M. C. Stamm, “MISLGAN: An anti-forensic camera model falsification framework using a generative adversarial network,” in *IEEE International Conference on Image Processing (ICIP)*, Athens, Greece, Sep. 2018.
- [2] M. Barni, M. C. Stamm, and B. Tondi, “Adversarial multimedia forensics: Overview and challenges ahead,” in *European Signal Processing Conference (EUSIPCO)*, Rome, Italy, Sep. 2018.
- [3] O. Mayer, B. Bayar, and M. C. Stamm, “Learning unified deep features for multimedia forensic tasks,” in *ACM Workshop on Information Hiding and Multimedia Security (IH&MMSec)*, Innsbruck, Austria, Jun. 2018,
Citations: 1.
- [4] O. Mayer and M. C. Stamm, “Learned forensic source similarity for unknown camera models,” in *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Calgary, Canada, Apr. 2018.
- [5] B. Bayar and M. C. Stamm, “Towards open set camera model identification using a deep learning framework,” in *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Calgary, Canada, Apr. 2018,
Citations: 2.

- [6] B. Bayar and M. C. Stamm, “Towards order of processing operations detection in JPEG-compressed images with convolutional neural networks,” in *IS&T Symposium on Electronic Imaging (EI) - Media Watermarking, Security, and Forensics*, Burlingame, CA, Feb. 2018, pp. 211–1–211–9,
Citations: 3.
- [7] B. Bayar and M. C. Stamm, “Augmented convolutional feature maps for robust cnn-based camera model identification,” in *IEEE International Conference on Image Processing (ICIP)*, Beijing, China, Sep. 2017, pp. 4098–4102,
Citations: 4.
- [8] C. Chen and M. C. Stamm, “Image filter identification using demosaicing residual features,” in *IEEE International Conference on Image Processing (ICIP)*, Beijing, China, Sep. 2017, pp. 4103–4107.
- [9] C. Chen, X. Zhao, and M. C. Stamm, “Detecting anti-forensic attacks on demosaicing-based camera model identification,” in *IEEE International Conference on Image Processing (ICIP)*, Beijing, China, Sep. 2017, pp. 1512–1516,
Citations: 1.
- [10] O. Mayer and M. C. Stamm, “Countering anti-forensics of lateral chromatic aberration,” in *ACM Workshop on Information Hiding and Multimedia Security (IH&MMSec)*, Philadelphia, PA, 2017, pp. 15–20,
Citations: 1.
- [11] B. Bayar and M. C. Stamm, “A generic approach towards image manipulation parameter estimation using convolutional neural networks,” in *ACM Workshop on Information Hiding and Multimedia Security (IH&MMSec)*, Philadelphia, PA, 2017, pp. 5–10,
Citations: 4.
- [12] B. Bayar and M. C. Stamm, “On the robustness of constrained convolutional neural networks to JPEG post-compression for image resampling detection,” in *accepted for publication in IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, New Orleans, LA, Mar. 2017, pp. 2152–2156,
Citations: 16.
- [13] B. Bayar and M. C. Stamm, “Design principles of convolutional neural networks for multimedia forensics,” in *IS&T Symposium on Electronic Imaging (EI) - Media Watermarking, Security, and Forensics - Special Session on Deep Learning for Multimedia Security*, San Francisco, CA, Feb. 2017, pp. 77–86,
Citations: 16.
- [14] O. Mayer, D. C. Lim, A. I. Pack, and M. C. Stamm, “Classification of sleep states in mice using generic compression algorithms,” in *EEE Signal Processing in Medicine and Biology Symposium (SPMB)*, Dec 2016, pp. 1–2.
- [15] X. Zhao and M. C. Stamm, “Computationally efficient demosaicing filter estimation for forensic camera model identification,” in *IEEE International Conference on Image Processing*

(*ICIP*), Sep. 2016, pp. 151–155,
Citations: 5.

- [16] S. DeCelles, , T. Huang, M. C. Stamm, and N. Kandasamy, “Detecting incipient faults in software systems: A compressed sampling-based approach,” in *IEEE International Conference on Cloud Computing (CLOUD) (15% acceptance rate)*, Jun. 2016, pp. 303–310.
- [17] B. Bayar and M. C. Stamm, “A deep learning approach to universal image manipulation detection using a new convolutional layer,” in *ACM Workshop on Information Hiding and Multimedia Security (IH&MMSec)*, Vigo, Galicia, Spain, 2016, pp. 5–10,
Citations: 76.
- [18] O. Mayer and M. C. Stamm, “Improved forgery detection with lateral chromatic aberration,” in *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, Shanghai, China, Mar. 2016, pp. 2024–2028,
Citations: 4.
- [19] S. DeCelles, M. C. Stamm, and N. Kandasamy, “Efficient online performance monitoring of computing systems using predictive models,” in *IEEE/ACM International Conference on Utility and Cloud Computing (UCC) (27.5% acceptance rate)*, Limassol, Cyprus, Dec. 2015, pp. 152–161.
- [20] C. Chen and M. C. Stamm, “Camera model identification framework using an ensemble of demosaicing features,” in *IEEE International Workshop on Information Forensics and Security (WIFS)*, Rome, Italy, Nov. 2015, pp. 1–6,
Citations: 20.
- [21] O. Mayer and M. C. Stamm, “Anti-forensics of chromatic aberration,” in *Proc. IS&T SPIE Electronic Imaging, Media Watermarking, Security, and Forensics*, San Francisco, CA, Feb. 2015, pp. 94 090M–94 090M,
Citations: 5.
- [22] X. Chu, Y. Chen, M. C. Stamm, and K. J. R. Liu, “Information theoretical limit of compression forensics,” in *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, Florence, Italy, May 2014, pp. 2689–2693,
Citations: 8.
- [23] M. C. Stamm, X. Chu, and K. J. R. Liu, “Forensically determining the order of signal processing operations,” in *IEEE International Workshop on Information Forensics and Security (WIFS)*, Guangzhou, China, Nov. 2013, pp. 162–167,
Citations: 18.
- [24] M. C. Stamm and K. J. R. Liu, “Protection against reverse engineering in digital cameras,” in *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Special Session on Adversarial Signal Processing*, Vancouver, Canada, May 2013, pp. 8702–8706,
Citations: 3.

- [25] X. Chu, M. C. Stamm, Y. Chen, and K. J. R. Liu, “Concealability-rate-distortion tradeoff in image compression anti-forensics,” in *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, Vancouver, Canada, May 2013, pp. 3063–3067, *Citations*: 5.
- [26] Z.-H. Wu, M. Stamm, and K. Liu, “Anti-forensics of median filtering,” in *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, Vancouver, Canada, May 2013, pp. 3043–3047, *Citations*: 29.
- [27] X. Kang, M. C. Stamm, A. Peng, and K. J. R. Liu, “Robust median filtering forensics based on the autoregressive model of median filtered residual,” in *Asia-Pacific Signal Information Processing Association Annual Summit and Conference (APSIPA ASC)*, Hollywood, California, Dec. 2012, pp. 1–9, *Citations*: 25.
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