List of Publications

1. **Ankit Kumar Jaiswal**, Rajeev Srivastava, "A Technique for Image Splicing Detection Using Hybrid Feature Set" Multimedia Tools and Applications (2020) 79:11837–11860, https://doi.org/10.1007/s11042-019-08480-6 (Springer, **IF: 2.757**)
2. **Ankit Kumar Jaiswal**, Rajeev Srivastava, "Time Efficient Spliced Image Analysis Using Higher-Order Statistics" Machine Vision and Applications 31, 56 (2020). https://doi.org/10.1007/s00138-020-01107-z (Springer, **IF: 2.012**)
3. **Ankit Kumar Jaiswal**, Rajeev Srivastava, "Forensic image analysis using inconsistent noise pattern" Pattern Analysis and Applications (2020). https://doi.org/10.1007/s10044-020-00930-4 (Springer, **IF: 2.580**)
4. **Ankit Kumar Jaiswal**, Rajeev Srivastava, "Detection of copy-move forgery in digital image using multi-scale, multi-stage deep learning model" Neural Processing Letters (2021). (Under Revision) (Springer, **IF: 2.908**)
5. **Ankit Kumar Jaiswal**, and Rajeev Srivastava, "Modified U-Net Model for Detection of Forged Region in Images Acquired from Variant Sources" Multimedia Tools and Applications. (Communicated) (Springer, **IF:2.757**)
6. **Ankit Kumar Jaiswal**, and Rajeev Srivastava "An investigation and analysis of forged digital document using deep inception network". International Journal of Machine Learning and Cybernetics. (Communicated) (Springer, **IF: 4.032**)
7. **Ankit Kumar Jaiswal**, and Rajeev Srivastava "Copy-Move Forgery Detection Using Shift-Invariant SWT and Block Division Mean Features" In Recent Trends in Communication, Computing, and Electronics, pp. 289-299. Springer, Singapore, 2019. *Scopus*
8. **Ankit Kumar Jaiswal**, and Rajeev Srivastava "Image Splicing Detection using Deep Residual Network" In Proceedings of 2nd International Conference on Advanced Computing and Software Engineering (ICACSE). 2019.
9. **Ankit Kumar Jaiswal**, Dhanin Gupta, and Rajeev Srivastava "Detection of Copy-Move Forgery Using Hybrid approach of DCT and BRISK" In 2020 7th International Conference on Signal Processing and Integrated Networks (SPIN), pp. 471-476. IEEE, 2020. *Scopus*
10. Vikas Mehta, **Ankit Kumar Jaiswal**, and Rajeev Srivastava "Copy-Move Image Forgery Detection Using DCT and ORB Feature Set" In International Conference on Futuristic Trends in Networks and Computing Technologies, pp. 532-544. Springer, Singapore, 2019. *Scopus*

References

[1] C. Cakebread, "People will take 1.2 trillion digital photos this year - thanks to smartphones," *Business Insider India*, Sep. 01, 2017.

[2] S. Micheks, "Google's Goal: Digitize Every Book Ever Printed," *PBS News Hour*, 2009. https://www.pbs.org/newshour/show/googles-goal-digitize-every-book-ever-printed (accessed Mar. 15, 2021).

[3] Adobe, "Adobe Sensi," 2018. https://www.adobe.com/in/sensei.html (accessed Mar. 19, 2018).

[4] FaceApp, "FaceApp-AI Face Editor," 2018. https://www.faceapp.com/ (accessed Mar. 19, 2018).

[5] A. Gupta, N. Saxena, and S. K. Vasistha, "Detecting Copy move Forgery using DCT," vol. 3, no. 5, pp. 3–6, 2013.

[6] F. Hakimi, M. Hariri, and F. Gharehbaghi, "Image splicing forgery detection using local binary pattern and discrete wavelet transform," *Conf. Proc. 2015 2nd Int. Conf. Knowledge-Based Eng. Innov. KBEI 2015*, pp. 1074–1077, 2016, doi: 10.1109/KBEI.2015.7436195.

[7] A. Willings, "Famous Photoshopped and doctored images from across the ages," *Pocket-Lint*, 2019. https://www.pocket-lint.com/apps/news/adobe/140252-30-famous-photoshopped-and-doctored-images-from-across-the-ages Accessed 05 March 2019 (accessed Mar. 05, 2019).

[8] V. Schetinger, M. M. Oliveira, R. da Silva, and T. J. Carvalho, "Humans are easily fooled by digital images," *Comput. Graph.*, vol. 68, pp. 142–151, 2017, doi: 10.1016/j.cag.2017.08.010.

[9] J. K. Tijdink, R. Verbeke, and Y. M. Smulders, "Publication pressure and scientific misconduct in medical scientists," *J. Empir. Res. Hum. Res. Ethics*, vol. 9, no. 5, pp. 64–71, 2014, doi: 10.1177/1556264614552421.

[10] N. Bakiah *et al.*, "Journal of Network and Computer Applications Copy-move forgery detection : Survey , challenges and future directions," *J. Netw. Comput. Appl.*, vol. 75, pp. 259–278, 2016, doi: 10.1016/j.jnca.2016.09.008.

[11] M. Doty, "Misinformation in 2016: A Timeline of Fake News (Photos)," *The Wrap*, 2016.

[12] J. Adams, K. Parulski, and K. Spaulding, "Color processing in digital cameras," *Micro, IEEE*, pp. 20–30, 1998, doi: 10.1109/40.743681.

[13] N. Zhu and Z. Li, "Blind image splicing detection via noise level function," *Signal Process. Image Commun.*, vol. 68, no. July, pp. 181–192, 2018, doi: 10.1016/j.image.2018.07.012.

[14] S. Lyu, X. Pan, and X. Zhang, "Exposing Region Splicing Forgeries with Blind Local Noise Estimation," *Int. J. Comput. Vis.*, vol. 110, no. 2, pp. 202–221, 2013,

doi: 10.1007/s11263-013-0688-y.

[15] X. Pan, X. Zhang, and S. Lyu, “Exposing image splicing with inconsistent local noise variances,” *2012 IEEE Int. Conf. Comput. Photogr. ICCP 2012*, 2012, doi: 10.1109/ICCPhot.2012.6215223.

[16] B. Mahdian and S. Saic, “Using noise inconsistencies for blind image forensics,” *Image Vis. Comput.*, vol. 27, no. 10, pp. 1497–1503, 2009, doi: 10.1016/j.imavis.2009.02.001.

[17] C. Riess, M. Unberath, F. Naderi, S. Pfaller, M. Stamminger, and E. Angelopoulou, “Handling multiple materials for exposure of digital forgeries using 2-D lighting environments,” *Multimed. Tools Appl.*, vol. 76, no. 4, pp. 4747–4764, 2017, doi: 10.1007/s11042-016-3655-0.

[18] T. J. De Carvalho, C. Riess, E. Angelopoulou, H. Pedrini, and A. D. R. Rocha, “Exposing digital image forgeries by illumination color classification,” *IEEE Trans. Inf. Forensics Secur.*, vol. 8, no. 7, pp. 1182–1194, 2013, doi: 10.1109/TIFS.2013.2265677.

[19] H. Yao, S. Wang, Y. Zhao, and X. Zhang, “Deteting Image Forgery Using Perspective Constraints,” *IEEE Signal Process. Lett.*, vol. 19, no. 3, pp. 123–126, 2012.

[20] P. Ferrara, T. Bianchi, A. De Rosa, and A. Piva, “Image forgery localization via fine-grained analysis of CFA artifacts,” *IEEE Trans. Inf. Forensics Secur.*, vol. 7, no. 5, pp. 1566–1577, 2012, doi: 10.1109/TIFS.2012.2202227.

[21] A. Singh, G. Singh, and K. Singh, “A Markov based image forgery detection approach by analyzing CFA artifacts,” *Multimed. Tools Appl.*, vol. 77, no. 21, pp. 28949–28968, 2018, doi: 10.1007/s11042-018-6075-5.

[22] P. Ferrara, T. Bianchi, A. De Rosa, and A. Piva, “Image forgery localization via fine-grained analysis of CFA artifacts,” *IEEE Trans. Inf. Forensics Secur.*, vol. 7, no. 5, pp. 1566–1577, 2012, doi: 10.1109/TIFS.2012.2202227.

[23] P. Korus and J. Huang, “Multi-Scale Fusion for Improved Localization of Malicious Tampering in Digital Images,” *IEEE Trans. Image Process.*, vol. 25, no. 3, pp. 1312–1326, 2016, doi: 10.1109/TIP.2016.2518870.

[24] C. Iakovidou, M. Zampoglou, S. Papadopoulos, and Y. Kompatsiaris, “Content-aware detection of JPEG grid inconsistencies for intuitive image forensics,” *J. Vis. Commun. Image Represent.*, vol. 54, no. July 2017, pp. 155–170, 2018, doi: 10.1016/j.jvcir.2018.05.011.

[25] W. Li, Y. Yuan, and N. Yu, “Passive detection of doctored JPEG image via block artifact grid extraction,” *Signal Processing*, vol. 89, no. 9, pp. 1821–1829, 2009, doi: 10.1016/j.sigpro.2009.03.025.

[26] Y. Zhu, X. Shen, and H. Chen, “Copy-move forgery detection based on scaled ORB,” *Multimed. Tools Appl.*, 2016, doi: 10.1007/s11042-014-2431-2.

[27] J. Fridrich, D. Soukal, and J. Lukáš, “Detection of Copy-Move Forgery in Digital Images,” *Proc. Digit. Forensic Res. Work.*, 2003, doi: 10.1109/PACIIA.2008.240.

[28] L. Weiqi, H. Jiwu, and Q. Guoping, “Robust detection of region-duplication forgery in digital image,” in *International Conference on Pattern Recognition*, 2006, vol. 4, pp. 746–749, doi: 10.1109/ICPR.2006.1003.

[29] B. Mahdian and S. Saic, “Detection of near-duplicated image regions,” *Adv. Soft Comput.*, vol. 45, pp. 187–195, 2007, doi: 10.1007/978-3-540-75175-5_24.

[30] T. Mahmood, A. Irtaza, Z. Mehmood, and M. Tariq Mahmood, “Copy–move forgery detection through stationary wavelets and local binary pattern variance for forensic analysis in digital images,” *Forensic Sci. Int.*, vol. 279, pp. 8–21, 2017, doi: 10.1016/j.forsciint.2017.07.037.

[31] A. Langille and M. Gong, “An efficient match-based duplication detection algorithm,” in *Third Canadian Conference on Computer and Robot Vision, CRV 2006*, 2006, vol. 2006, pp. 1–8, doi: 10.1109/CRV.2006.9.

[32] B. Mahdian and S. Saic, “Detection of copy-move forgery using a method based on blur moment invariants,” *Forensic Sci. Int.*, vol. 171, no. 2–3, pp. 180–189, 2007, doi: 10.1016/j.forsciint.2006.11.002.

[33] S. Bayram, H. T. Sencar, and N. Memon, “An efficient and robust method for detecting copy-move forgery,” in *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2009, pp. 1053–1056.

[34] X. P. X. Pan and S. L. S. Lyu, “Region Duplication Detection Using Image Feature Matching,” *IEEE Trans. Inf. Forensics Secur.*, vol. 5, no. 4, pp. 857–867, 2010, doi: 10.1109/TIFS.2010.2078506.

[35] T. Mahmood, Z. Mehmood, M. Shah, and Z. Khan, “An efficient forensic technique for exposing region duplication forgery in digital images,” *Appl. Intell.*, no. September, pp. 1–11, 2017, doi: 10.1007/s10489-017-1038-5.

[36] I. Amerini, L. Ballan, R. Caldelli, A. Del Bimbo, and G. Serra, “A SIFT-based forensic method for copy-move attack detection and transformation recovery,” *IEEE Trans. Inf. Forensics Secur.*, vol. 6, no. 3 PART 2, pp. 1099–1110, 2011, doi: 10.1109/TIFS.2011.2129512.

[37] F. Yang, J. Li, W. Lu, and J. Weng, “Copy-move forgery detection based on hybrid features,” *Eng. Appl. Artif. Intell.*, vol. 59, no. December 2016, pp. 73–83, 2017, doi: 10.1016/j.engappai.2016.12.022.

[38] S. Agarwal and S. Chand, “Image Forgery Detection Using Co-occurrence-Based Texture Operator in Frequency Domain,” *Adv. Intell. Syst. Comput. Springer Singapore*, vol. 519, pp. 117–122, 2018, doi: 10.1007/978-981-10-3376-6.

[39] Y. Liu, Q. Guan, and X. Zhao, “Copy-move forgery detection based on convolutional kernel network,” *Multimed. Tools Appl.*, vol. 77, no. 14, pp. 18269–18293, 2018, doi: 10.1007/s11042-017-5374-6.

[40] Y. Wu, W. Abd-Almageed, and P. Natarajan, “Image copy-move forgery detection via an end-to-end deep neural network,” *Proc. - 2018 IEEE Winter Conf. Appl. Comput. Vision, WACV 2018*, vol. 2018-Janua, no. d, pp. 1907–1915, 2018, doi: 10.1109/WACV.2018.00211.

[41] M. A. Elaskily *et al.*, “A novel deep learning framework for copy-moveforgery detection in images,” *Multimed. Tools Appl.*, pp. 19167–19192, 2020, doi: 10.1007/s11042-020-08751-7.

[42] X. Zhao, J. Li, S. Li, and S. Wang, “Detecting digital image splicing in chroma spaces,” *Int. Work. Digit. Watermarking*, pp. 12–22, 2010.

[43] A. A. Alahmadi, M. Hussain, H. Aboalsamh, G. Muhammad, and G. Bebis, “Splicing Image Forgery Detection Based on DCT and Local Binary Pattern,” *Glob. Conf. Signal Inf. Process. IEEE*, pp. 253–256, 2013.

[44] W. Wang, J. Dong, and T. Tan, “Effective Image Splicing Detection Based on Image Chroma,” in *IEEE International Conference on Image Processing*, 2009, pp. 1257–1260.

[45] Z. He, W. Lu, W. Sun, and J. Huang, “Digital image splicing detection based on Markov features in DCT and DWT domain,” *Pattern Recognit.*, vol. 45, no. 12, pp. 4292–4299, 2012, doi: 10.1016/j.patcog.2012.05.014.

[46] G. Muhammad, M. H. Al-Hammadi, M. Hussain, and G. Bebis, “Image forgery detection using steerable pyramid transform and local binary pattern,” *Mach. Vis. Appl.*, vol. 25, no. 4, pp. 985–995, 2014, doi: 10.1007/s00138-013-0547-4.

[47] S. Agarwal and S. Chand, “Image Forgery Detection using Multi Scale Entropy Filter and Local Phase Quantization,” *Int. J. Image, Graph. Signal Process.*, vol. 8, no. 10, pp. 64–74, 2015, doi: 10.5815/ijigsp.2015.10.08.

[48] A. R. Abrahim, M. S. M. Rahim, and G. Bin Sulong, “Splicing image forgery identification based on artificial neural network approach and texture features,” *Cluster Comput.*, pp. 1–14, 2018, doi: 10.1007/s10586-017-1668-8.

[49] U. Tutorials, “Convolutional Neural Network.” http://deeplearning.stanford.edu/tutorial/supervised/ConvolutionalNeuralNetwork/ (accessed Feb. 10, 2020).

[50] D. Cozzolino and L. Verdoliva, “Noiseprint: A CNN-Based Camera Model Fingerprint,” *IEEE Trans. Inf. Forensics Secur.*, vol. 15, no. 1, pp. 144–159, 2020, doi: 10.1109/TIFS.2019.2916364.

[51] Y. Rao and J. Ni, “A deep learning approach to detection of splicing and copy-move forgeries in images,” *8th IEEE International Workshop on Information Forensics and Security, WIFS 2016*. IEEE, pp. 1–6, 2017, doi: 10.1109/WIFS.2016.7823911.

[52] J. H. Bappy, C. Simons, L. Nataraj, B. S. Manjunath, and A. K. Roy-Chowdhury, “Hybrid LSTM and Encoder-Decoder Architecture for Detection of Image Forgeries,” *IEEE Trans. Image Process.*, vol. 28, no. 7, pp. 3286–3300, 2019, doi: 10.1109/TIP.2019.2895466.

[53] M. K. Johnson and H. Farid, “Exposing Digital Forgeries in Complex Lighting Environments,” *IEEE Trans. Inf. Forensics Secur.*, vol. 2, no. 3, pp. 450–461, 2007.

[54] Q. Liu, X. Cao, C. Deng, and X. Guo, “Identifying image composites through

shadow matte consistency," *IEEE Trans. Inf. Forensics Secur.*, vol. 6, no. 3 PART 2, pp. 1111–1122, 2011, doi: 10.1109/TIFS.2011.2139209.

[55] M. K. Johnson and H. Farid, "Exposing digital forgeries by detecting inconsistencies in lighting," *Proc. 7th Work. Multimed. Secur. - MM&Sec '05*, pp. 1–10, 2005, doi: 10.1145/1073170.1073171.

[56] B. Peng, W. Wang, J. Dong, and T. Tan, "Optimized 3D lighting environment estimation for image forgery detection," *IEEE Trans. Inf. Forensics Secur.*, vol. 12, no. 2, pp. 479–494, 2017, doi: 10.1109/TIFS.2016.2623589.

[57] M. Iuliani, G. Fabbri, and A. Piva, "Image splicing detection based on general perspective constraints," *2015 IEEE Int. Work. Inf. Forensics Secur. WIFS*, pp. 0–5, 2015, doi: 10.1109/WIFS.2015.7368598.

[58] W. Zhang, X. Cao, Y. Qu, Y. Hou, H. Zhao, and C. Zhang, "Detecting and extracting the photo composites using planar homography and graph cut," *IEEE Trans. Inf. Forensics Secur.*, vol. 5, no. 3, pp. 544–555, 2010, doi: 10.1109/TIFS.2010.2051666.

[59] A. Swaminathan, M. Wu, and K. J. R. Liu, "Nonintrusive component forensics of visual sensors using output images," *IEEE Trans. Inf. Forensics Secur.*, vol. 2, no. 1, pp. 91–105, 2007, doi: 10.1109/TIFS.2006.890307.

[60] T. Bianchi, A. De Rosa, and A. Piva, "Improved DCT coefficient analysis for forgery localization in JPEG images," *ICASSP, IEEE Int. Conf. Acoust. Speech Signal Process. - Proc.*, pp. 2444–2447, 2011, doi: 10.1109/ICASSP.2011.5946978.

[61] H. Zeng, Y. Zhan, and X. Kang, "Image splicing localization using PCA-based noise level estimation," *Multimed. Tools Appl.*, 2016, doi: 10.1007/s11042-016-3712-8.

[62] G. Chierchia, G. Poggi, C. Sansone, and L. Verdoliva, "A bayesian-MRF approach for PRNU-based image forgery detection," *IEEE Trans. Inf. Forensics Secur.*, vol. 9, no. 4, pp. 554–567, 2014, doi: 10.1109/TIFS.2014.2302078.

[63] H. Yao, S. Wang, X. Zhang, C. Qin, and J. Wang, "Detecting Image Splicing Based on Noise Level Inconsistency," *Multimed. Tools Appl.*, vol. 76, no. 10, pp. 12457–12479, 2017, doi: 10.1007/s11042-016-3660-3.

[64] A. C. Popescu and H. Farid, "Statistical Tools for Digital Forensics," Dartmouth College, Hanover, 2004.

[65] J. Dong and W. Wang, "CASIA v1.0 and CASIA v2.0 Image Splicing Dataset," *Natl. Lab. Pattern Recognition, Inst. Autom. Chinese Acad. Sci. Corel Image Database*.

[66] T. IFS, "IEEE IFS-TC Image Forensics Challenge Database," *IEEE Signal Processing*. .

[67] Y.-F. Hsu and S.-F. Chang, "Detecting Image Splicing Using Geometry Invariants and Camera Characteristics Consistency," 2006.

[68] D. Tralic, I. Zupancic, S. Grgic, and M. Grgic, “CoMoFoD - New Database for Copy-Move Forgery Detection,” 2013.

[69] A. C. Popescu and H. Farid, “Exposing digital forgeries by detecting duplicated image regions,” *Dept. Comput. Sci., Dartmouth Coll. Tech. Rep. TR2004-515*, no. 2000, pp. 1–11, 2004, doi: 10.1109/TSP.2004.839932.

[70] H. Lin, C. Wang, and Y. Kao, “Fast Copy-Move Forgery Detection,” *WSEAS Trans. Signal Process.*, vol. 5, no. 5, pp. 188–197, 2009, [Online]. Available: http://www.scopus.com/inward/record.url?eid=2-s2.0-70350023285&partnerID=40&md5=38d16c87d622e9a611a8a864b2415c06.

[71] M. Zimba and S. Xingming, “DWT-PCA (EVD) Based Copy-move Image Forgery Detection,” *Int. J. Digit. Content Technol. its Appl.*, vol. 5, no. 1, pp. 251–258, 2011, doi: 10.4156/jdcta.vol5.issue1.27.

[72] B. Yang, X. Sun, H. Guo, Z. Xia, and X. Chen, “A copy-move forgery detection method based on CMFD-SIFT,” *Multimed. Tools Appl.*, no. 1800, pp. 1–19, 2017, doi: 10.1007/s11042-016-4289-y.

[73] A. Novozámský and M. Šorel, “Detection of copy-move image modification using JPEG compression model,” *Forensic Sci. Int.*, vol. 283, pp. 47–57, 2018, doi: 10.1016/j.forsciint.2017.11.031.

[74] E. Rublee, V. Rabaud, K. Konolige, and G. Bradski, “ORB: An efficient alternative to SIFT or SURF,” in *Proceedings of the IEEE International Conference on Computer Vision*, 2011, vol. 65, no. 10, pp. 2564–2571, doi: 10.1109/ICCV.2011.6126544.

[75] E. Rosten, R. Porter, and T. Drummond, “Faster and better: A machine learning approach to corner detection,” *IEEE Trans. Pattern Anal. Mach. Intell.*, vol. 32, no. 1, pp. 105–119, 2010, doi: 10.1109/TPAMI.2008.275.

[76] E. Rosten and T. Drummond, “Machine learning for high-speed corner detection,” 2006, doi: 10.1007/11744023_34.

[77] M. Calonder, V. Lepetit, C. Strecha, and P. Fua, “BRIEF: Binary robust independent elementary features,” 2010, doi: 10.1007/978-3-642-15561-1_56.

[78] D. G. Lowe, “Distinctive image features from scale-invariant keypoints,” *Int. J. Comput. Vis.*, 2004, doi: 10.1023/B:VISI.0000029664.99615.94.

[79] Y. Wu, W. Abd-Almageed, and P. Natarajan, “BusterNet: Detecting copy-move image forgery with source/target localization,” *Lect. Notes Comput. Sci. (including Subser. Lect. Notes Artif. Intell. Lect. Notes Bioinformatics)*, vol. 11210 LNCS, pp. 170–186, 2018, doi: 10.1007/978-3-030-01231-1_11.

[80] S. J. Ryu, M. J. Lee, and H. K. Lee, “Detection of copy-rotate-move forgery using zernike moments,” 2010, doi: 10.1007/978-3-642-16435-4_5.

[81] R. Takahashi, T. Matsubara, and K. Uehara, “A novel weight-shared multi-stage CNN for scale robustness,” *IEEE Trans. Circuits Syst. Video Technol.*, vol. 29, no. 4, pp. 1090–1101, 2019, doi: 10.1109/TCSVT.2018.2822773.

[82] M. R. Zadeh, S. Amin, D. Khalili, and V. P. Singh, “Daily Outflow Prediction by Multi Layer Perceptron with Logistic Sigmoid and Tangent Sigmoid Activation Functions,” *Water Resour. Manag.*, vol. 24, no. 11, pp. 2673–2688, 2010, doi: 10.1007/s11269-009-9573-4.

[83] C. M. Bishop, *Pattern Recognition and Machine Learning by Christopher*. Springer Science+ Business Media, LLC., 2006.

[84] G. M. Tralic D., Zupancic I., Grgic S., “CoMoFoD - New Database for Copy-Move Forgery Detection,” *Proc. 55th International Symposium ELMAR-2013*. http://www.vcl.fer.hr/comofod/download.html (accessed Oct. 11, 2017).

[85] E. Ardizzone, A. Bruno, and G. Mazzola, “Copy – Move Forgery Detection by Matching Triangles of Keypoints Copy-Move Forgery Detection by Matching Triangles of Keypoints,” *IEEE Trans. Inf. FORENSICS Secur.*, vol. 10, no. October, pp. 2084–2094, 2015, doi: 10.1109/TIFS.2015.2445742.

[86] B. Chen, W. Tan, G. Coatrieux, Y. Zheng, and Y. Q. Shi, “A serial image copy-move forgery localization scheme with source/target distinguishment,” *IEEE Trans. Multimed.*, vol. 9210, no. c, pp. 1–1, 2020, doi: 10.1109/tmm.2020.3026868.

[87] J. Li, X. Li, B. Yang, and X. Sun, “Segmentation-based image copy-move forgery detection scheme,” *IEEE Trans. Inf. Forensics Secur.*, vol. 10, no. 3, pp. 507–518, 2015, doi: 10.1109/TIFS.2014.2381872.

[88] E. Silva, T. Carvalho, A. Ferreira, and A. Rocha, “Going deeper into copy-move forgery detection: Exploring image telltales via multi-scale analysis and voting processes,” *J. Vis. Commun. Image Represent.*, vol. 29, pp. 16–32, 2015, doi: 10.1016/j.jvcir.2015.01.016.

[89] Z. Zhang, Y. Zhou, J. Kang, and Y. Ren, “Study of Image Splicing Detection,” *Int. Conf. Intell. Comput. Springer, Berlin, Heidelb.*, pp. 1103–1110, 2008, doi: 10.1007/978-3-540-87442-3_136.

[90] I. Amerini, R. Becarelli, R. Caldelli, and A. Del Mastio, “Splicing forgeries localization through the use of first digit features,” *2014 IEEE Int. Work. Inf. Forensics Secur. WIFS 2014*, pp. 143–148, 2015, doi: 10.1109/WIFS.2014.7084318.

[91] K. Asghar, Z. Habib, and M. Hussain, “Copy-Move and Splicing Image Forgery Detection and Localization Techniques: A Review,” *Aust. J. Forensic Sci.*, vol. 49, no. 3, pp. 281–307, 2017, doi: 10.1080/00450618.2016.1153711.

[92] C. Maigrot *et al.*, “Tampering detection and localization in images from social networks : A CBIR approach,” *HAL Id: hal-01623105*, 2017.

[93] J. Bunk *et al.*, “Detection and Localization of Image Forgeries Using Resampling Features and Deep Learning,” *IEEE Comput. Soc. Conf. Comput. Vis. Pattern Recognit. Work.*, vol. 2017-July, pp. 1881–1889, 2017, doi: 10.1109/CVPRW.2017.235.

[94] “Matlab RGb2Gray.”

https://in.mathworks.com/help/matlab/ref/rgb2gray.html#description (accessed Jun. 07, 2018).

[95] N. Dalal and W. Triggs, "Histograms of Oriented Gradients for Human Detection," *2005 IEEE Comput. Soc. Conf. Comput. Vis. Pattern Recognit. CVPR05*, vol. 1, no. 3, pp. 886–893, 2004, doi: 10.1109/CVPR.2005.177.

[96] D. G. Viswanathan, "Features from Accelerated Segment Test (FAST)," in *Proceedings -10th workshop on Image Analysis for Multimedia Interactive Services*, pp. 6–8.

[97] R. Kumar, R. Srivastava, and S. Srivastava, "Detection and Classification of Cancer from Microscopic Biopsy Images Using Clinically Significant and Biologically Interpretable Features," *J. Med. Eng.*, vol. 2015, pp. 1–14, 2015, doi: 10.1155/2015/457906.

[98] S. Srivastava, N. Sharma, S. K. Singh, and R. Srivastava, "Design , analysis and classifier evaluation for a CAD tool for breast cancer detection from digital mammograms," *Int. J. Biomed. Eng. Technol.*, vol. 13, no. 3, pp. 270–300, 2013.

[99] T. Ojala, M. Pietikäinen, and D. Harwood, "A comparative study of texture measures with classification based on featured distributions," *Pattern Recognit.*, vol. 29, no. 1, pp. 51–59, 1996, doi: 10.1016/0031-3203(95)00067-4.

[100] T.-T. Ng, J. Hsu, and S.-F. Chang, "Columbia Image Splicing Detection Evaluation Dataset," *DVMM Laboratory of Columbia University, CalPhotos Digital Library*. .

[101] A. K. Jaiswal and R. Srivastava, "Image Splicing Detection using Deep Residual Network," *SSRN Electron. J.*, 2019, doi: 10.2139/ssrn.3351072.

[102] S. McLaughlin, A. Stogioglou, and J. Fackrell, "Introducing Higher Order Statistics (HOS) for the Detection of Nonlinearities," *UK Nonlinear News*, 1995.

[103] K. G. Jöreskog, "Formulas for skewness and kurtosis," *Sci. Softw. Int. http//www. ssicentral. com/lisrel*, 1999.

[104] P. Meer, J. M. Jolion, and A. Rosenfeld, "A Fast Parallel Algorithm for Blind Estimation of Noise Variance," *IEEE Trans. Pattern Anal. Mach. Intell.*, vol. 12, no. 2, pp. 216–223, 1990, doi: 10.1109/34.44408.

[105] A. K. Jain, *Fundamentals of digital image processing*. PHI Learning, 2008.

[106] R. R. Coifman and D. L. Donoho, "Translation-Invariant De-Noising," *Wavelets Stat.*, vol. 103, pp. 125–150, 1995, doi: 10.1007/978-1-4612-2544-7_9.

[107] W. Jiang, T. Z. Shen, W. Jiang, and K. M. Lam, "Efficient Edge Detection Using Simplified Gabor Wavelets," *IEEE Trans. Syst. Man. Cybern.*, vol. 39, no. 4, pp. 1036–1047, 2009, doi: 10.1109/TSMCB.2008.2011646.

[108] F. Experts, "Tampering and Forgery of Documents." http://www.forensicexperts.com.sg/tampering-forgery-documents (accessed May 06, 2020).

[109] C. Lin and S. Chang, “A Robust Image Authentication Method Distinguishing JPEG Compression from Malicious Manipulation,” *IEEE Trans. CIRCUITS Syst. VIDEO Technol.*, vol. 11, no. 2, pp. 153–168, 2001.

[110] G. L. Friedman, “The trustworthy digital camera: Restoring credibility to the photographic image,” *IEEE Trans. Consum. Electron.*, vol. 39, no. 4, pp. 905–910, 1993, doi: 10.1109/30.267415.

[111] J. Fridrich, “Methods for tamper detection in digital images,” *Proc. Work. Multimed. Secur.*, pp. 19–23, 1999.

[112] P. Korus, “Digital image integrity–a survey of protection and verification techniques,” *Digit. Signal Process.*, vol. 71, pp. 1–26, 2017, doi: 10.1016/j.dsp.2017.08.009.

[113] F. Zeng, W. Wang, J. Chen, and M. Tang, “Detecting blurred image splicing using blur type inconsistency,” *Int. J. Innov. Comput. Appl.*, vol. 8, no. 1, pp. 31–40, 2017, doi: 10.1504/IJICA.2017.082495.

[114] K. Bahrami, A. C. Kot, L. Li, and H. Li, “Blurred image splicing localization by exposing blur type inconsistency,” *IEEE Trans. Inf. Forensics Secur.*, vol. 10, no. 5, 2015, doi: 10.1109/TIFS.2015.2394231.

[115] Y. Rao, J. Ni, and H. Zhao, “Deep Learning Local Descriptor for Image Splicing Detection and Localization,” *IEEE Access*, pp. 25611–25625, 2020.

[116] R. Zhang, “A DENSE U-NET WITH CROSS-LAYER INTERSECTION FOR DETECTION AND LOCALIZATION OF IMAGE FORGERY School of Data and Computer Science , Sun Yat-Sen University , China Cyberspace Security Research Center , Peng Cheng Laboratory , Shenzhen , China,” pp. 2982–2986, 2020.

[117] O. Ronneberger, P. Fischer, and T. Brox, “U-net: Convolutional networks for biomedical image segmentation,” *arXiv Prepr.*, vol. 9351, pp. 234–241, 2015, doi: 10.1007/978-3-319-24574-4_28.

[118] S. Ioffe and C. Szegedy, “Batch normalization: Accelerating deep network training by reducing internal covariate shift,” *32nd Int. Conf. Mach. Learn. ICML 2015*, vol. 1, pp. 448–456, 2015.

[119] K. He, X. Zhang, S. Ren, and J. Sun, “Deep residual learning for image recognition,” *Proc. IEEE Comput. Soc. Conf. Comput. Vis. Pattern Recognit.*, vol. 2016-Decem, pp. 770–778, 2016, doi: 10.1109/CVPR.2016.90.

[120] “Param Shivay Architecture.” https://iitbhu.ac.in/cf/scc/param_shivay/architecture (accessed Jan. 10, 2020).

[121] V. Badrinarayanan, A. Kendall, and R. Cipolla, “Segnet: A deep convolutional encoder-decoder architecture for image segmentation,” *IEEE Trans. Pattern Anal. Mach. Intell.*, vol. 39, no. 12, pp. 2481–2495, 2017.

[122] M. Huh, A. Liu, A. Owens, and A. A. Efros, “Fighting Fake News: Image Splice Detection via Learned Self-Consistency,” in *Proceedings of the European Conference on Computer Vision (ECCV)*, 2018, vol. 1, pp. 101–117, doi:

10.1007/978-3-030-01252-6.

[123] N. Krawetz, *A Picture ' s Worth: Digital Image Analysis and Forensics*. USA: Black Hat Briefings, 2007.

[124] S. Ye, Q. Sun, and E.-C. Chang, "DETECTING DIGITAL IMAGE FORGERIES BY MEASURING INCONSISTENCIES OF BLOCKING ARTIFACT," in *IEEE International Conference on Multimedia and Expo*, 2007, vol. 117543, no. 2, pp. 12–15.

[125] N. Sidere, F. Cruz, M. Coustaty, and J. M. Ogier, "A dataset for forgery detection and spotting in document images," *Proc. - 2017 7th Int. Conf. Emerg. Secur. Technol. EST 2017*, pp. 26–31, 2017, doi: 10.1109/EST.2017.8090394.

[126] G. Jaume, H. Kemal Ekenel, and J.-P. Thiran, "FUNSD: A Dataset for Form Understanding in Noisy Scanned Documents," in *International Conference on Document Analysis and Recognition Workshops (ICDARW)*, 2019, pp. 1–6, doi: 10.1109/icdarw.2019.10029.

[127] A. Chaurasia and E. Culurciello, "LinkNet: Exploiting encoder representations for efficient semantic segmentation," *2017 IEEE Vis. Commun. Image Process. VCIP 2017*, vol. 2018-Janua, pp. 1–4, 2018, doi: 10.1109/VCIP.2017.8305148.

[128] H. Zhao, J. Shi, X. Qi, X. Wang, and J. Jia, "Pyramid scene parsing network," *30th IEEE Conf. Comput. Vis. Pattern Recognition, CVPR 2017*, vol. 2017-Janua, pp. 6230–6239, 2017, doi: 10.1109/CVPR.2017.660.

[129] T. T. Ng, S. F. Chang, C. Y. Lin, and Q. Sun, "Passive-blind Image Forensics," *Multimed. Secur. Technol. Digit. Rights Manag.*, pp. 383–412, 2006, doi: 10.1016/B978-012369476-8/50017-8.