FERDA OFLI

Contact Information

Qatar Computing Research Institute
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Research Interests

Computer vision, machine learning, artificial intelligence, multimodal/cross-modal learning, remote sensing, earth observation, crisis computing, sustainable development, humanitarian AI.

Current Position

Hamad Bin Khalifa University, Doha, Qatar — 04/2014 – present
Principal Scientist in the Qatar Computing Research Institute

Education

University of California, Berkeley, CA, USA — 09/2010 – 04/2014
Post-doc. in Electrical Engineering and Computer Sciences
Advisor: Ruzena Bajcsy

Koç University, Istanbul, Turkey — 08/2010
Ph.D. in Electrical and Electronic Engineering
Advisors: A. Murat Tekalp, Y'ucel Yemez, Engin Erzin

Koç University, Istanbul, Turkey — 06/2005
B.Sc. in Electrical and Electronic Engineering
B.Sc. in Computer Engineering

Honors & Awards

Outstanding Reviewer Award, CVPR, Nashville, TN, USA	2025
Deployed Application Award, AAAI, Vancouver, Canada	2024
Outstanding Reviewer Award, IEEE SIU, Istanbul, Turkey	2023
Best Presentation Award, GIS Technology Day, Doha, Qatar	2023
Best Presentation Award, GIS Technology Day, Doha, Qatar	2022
Outstanding Reviewer Award, CVPR, Online	2021
Outstanding Reviewer Award, CVPR, Online	2020
Best CoRe Paper Award, ISCRAM, Blacksburg, Virginia, USA	2020
Best Insight Paper Award, ISCRAM, València, Spain	2019
Best Paper Award Runner-up, ISCRAM, València, Spain	2019
Senior Member, Institute of Electrical and Electronics Engineers (IEEE)	2018
Senior Member, Association for Computing Machinery (ACM)	2018
Best Paper Award Runner-up, ISCRAM, Albi, France	2017
Best Paper Award, Elsevier Journal of Visual Computing and Image Representation	2015
Alper Atalay Best Student Paper Award Runner-up, IEEE SIU, Antalya, Turkey	2011
Graduate Studies Excellence Award, Koç University	2010
PhD Fellowship, The Scientific and Technological Research Council of Turkey	2006 – 2010
PhD Twinning Fellowship, European FP6 Network of Excellence SIMILAR	2006
Graduate Scholarship, Koç University	2005 – 2006
Undergraduate Scholarship, Koç University	2000 – 2005

Funding

Mapping Vulnerable Populations, EPFL-ETHZ-ICRC-QCRI (CHF 383K), EHA Init.	2021 – 2023
Re-Energize DR3 Consortium (USD 2M total, 667K QCRI), Belmont Forum	2020 – 2023
Recipe Generation, QCRI-MIT-Nestle (USD 150K total, 40K QCRI), Nestle	2020
Humanitarian Image Analysis, QCRI-MIT (USD 350K), Qatar Foundation (QF)	2019 – 2020
Understanding Health Habits from Social Media Pictures, QCRI-MIT (USD 1M), QF	2016 – 2019

Academic Footprint

	Google Scholar	Scopus
Citations	8681	4980
h-index	41	36
i10-index	68	52
i100-index	26	14

Patents

[1] M. Imran, R. Sadiq, Z. Akhtar, **F. Ofli**, "Remote sensing and social sensing for flood mapping" US Patent App. 18/198,070, May 16, 2023.

Book Chapters

[2] Z. Akhtar, M. Sajjad, M. Imran, **F. Ofli**, "Risk Mapping in Managing Flood vulnerability in Disaster Management." In Amita Singh (Ed), *International Handbook of Disaster Research*, Chapter 177, pp. 1–34. Springer Singapore, ISBN: 9789811688003, 2023. https://doi.org/10.1007/978-981-16-8800-3_177-1

[3] F. Alam, K. Ahmed, M. A. Hasan, **F. Ofli**, M. Imran, "Role of Social Media Imagery in Disaster Informatics." In Amita Singh (Ed), *International Handbook of Disaster Research*, Chapter 170, pp. 1–21. Springer Singapore, ISBN: 9789811688003, 2023. https://doi.org/10.1007/978-981-16-8800-3_170-1

[4] R. Sadiq, M. Imran, **F. Ofli**, "Remote Sensing for Flood Mapping and Monitoring." In Amita Singh (Ed), *International Handbook of Disaster Research*, Chapter 178, pp. 1–19. Springer Singapore, ISBN: 9789811688003, 2023. https://doi.org/10.1007/978-981-16-8800-3_178-1

[5] **F. Ofli**, M. Imran, F. Alam, "Using Artificial Intelligence and Social Media for Disaster Response and Management: An Overview." In T. V. Vijay Kumar and Keshav Sud (Eds), *AI and Robotics in Disaster Studies*, Chapter 5, pp. 63–81. Springer Singapore, ISBN: 9789811542916, 2020. https://doi.org/10.1007/978-981-15-4291-6_5

[6] M. Imran, F. Alam, **F. Ofli**, M. Aupetit, "Enabling Rapid Disaster Response Using Artificial Intelligence and Social Media." In R. J. Durrheim and B. G. N. Sewwandi (Eds), *Mitigating the Impact of Extreme Natural Events in Developing Countries*, Chapter 23, pp. 255–268. Daya Publishing House, ISBN: 9789388982160, 2019.

[7] C. Castillo, M. Imran, P. Meier, J.K. Lucas, J. Srivastava, H. Leson, **F. Ofli**, P. Mitra, et al. "Supporting Decision in Crisis Response: Artificial Intelligence for Digital Response and MicroMappers." In OCHA and partners (Eds), *Together We Stand*, Chapter 25, pp. 93–95. Tudor Rose, World Humanitarian Summit, Istanbul, ISBN: 9780956856180, 2016.

Journal Articles

[8] F. F. R. Alnaimi, A. Al-Homaid, **F. Ofli**, A. Baggag, "Rapid Disaster Damage Assessment Using Deep Adversarial Sliced Wasserstein Domain Adaptation," *Neural Computing & Applications (NCAA)*, 2026.

[9] N. Al-Emadi, M. Imran, Y. Yang, I. Weber, F. Lashi, G. Rigodanza, I. Hajžmanová, **F. Ofli**, "AI-Driven Disaster Response and Displacement Monitoring," *Communications of the ACM (CACM)*, 68(10):66–71, 2025. https://doi.org/10.1145/3737449

[10] S. Al-Emadi, Y. Yang, **F. Ofli**, "Analysing Satellite Imagery Classification under Spatial Domain Shift across Geographic Regions," *International Journal of Computer Vision (IJCV)*, 2025. https://doi.org/10.1007/s11263-025-02518-z

[11] N. Al-Emadi, I. Weber, Y. Yang, **F. Ofli**, "VME: A Satellite Imagery Dataset and Benchmark for Detecting Vehicles in the Middle East and Beyond," *Nature Scientific Data*, 12(1):500, 2025. https://doi.org/10.1038/s41597-025-04567-y

[12] A. Kantarcı, **F. Ofli**, M. Imran, H. K. Ekenel, "Bias-Aware Face Mask Detection Dataset," *Multimedia Tools and Applications (MTAP)*, 84(24): 28839–28851, 2025. https://doi.org/10.1007/s11042-024-20226-7

[13] M.-C. Rufener, **F. Ofli**, M. Fatehkia, I. Weber, "Estimation of Internal Displacement in Ukraine from Satellite-Based Car Detections," *Nature Scientific Reports*, 14(1):31638, 2024. https://doi.org/10.1038/s41598-024-80035-8

[14] Z. Akhtar, U. Qazi, A. El-Sakka, R. Sadiq, **F. Ofli**, M. Imran, "Fusing Remote and Social Sensing Data for Flood Impact Mapping," *AI Magazine*, 45(4):486–501, 2024. https://doi.org/10.1002/aaai.12196

[15] F. Alam, T. Alam, **F. Ofli**, M. Imran, "Robust Training of Social Media Image Classification Models," *Transactions on Computational Social Systems (TCSS)*, 11(1):546–565, 2024. https://doi.org/10.1109/TCSS.2022.3230839

[16] **F. Ofli**, M. Imran, U. Qazi, J. Roch, C. Pennington, V. Banks, R. Bossu, "Landslide Detection in Real-Time Social Media Image Streams," *Neural Computing & Applications (NCAA)*, 35(24):17809–17819, 2023. https://doi.org/10.1007/s00521-023-08648-0

[17] R. Sadiq, Z. Akhtar, S. Peterson, K. Keegan, A. El-Sakka, M. Imran, **F. Ofli**, "Towards Fine-grained Object-level Damage Assessment during Disasters," *Frontiers in Earth Science*, 11:990930, 2023. https://doi.org/10.3389/feart.2023.990930

[18] E. Weber, D. Papadopoulos, A. Lapedriza, **F. Ofli**, M. Imran, A. Torralba, "Incidents1M: a large-scale dataset of images with natural disasters, damage, and incidents," *Transactions on Pattern Analysis and Machine Intelligence (PAMI)*, 45(4):4768–4781, 2023. https://doi.org/10.1109/TPAMI.2022.3191996

[19] F. Alam, T. Alam, M. A. Hasan, A. Hasnat, M. Imran, **F. Ofli**, "MEDIC: a multi-task learning dataset for disaster image classification," *Neural Computing & Applications (NCAA)*, 35(3):2609–2632, 2023. https://doi.org/10.1007/s00521-022-07717-0

[20] F. I. Eyiokur, A. Kantarcı, M. E. Erakın, N. Damer, **F. Ofli**, M. Imran, J. Križaj, A. A. Salah, A. Waibel, V. Štruc, H. K. Ekenel, "A Survey on Computer Vision based Human Analysis in the COVID-19 Era," *Image and Vision Computing (IMAVIS)*, 130:104610, 2023. https://doi.org/10.1016/j.imavis.2022.104610

[21] N. Metzger, J. E. Vargas-Muñoz, R. C. Daudt, B. Kellenberger, T. T.-T. Whelan, **F. Ofli**, M. Imran, K. Schindler, D. Tuia, "Fine-grained Population Mapping from Coarse Census Counts and Open Geodata," *Nature Scientific Reports*, 12(1):20085, 2022. https://doi.org/10.1038/s41598-022-24495-w

[22] C. Pennington, R. Bossu, **F. Ofli**, M. Imran, U. Qazi, J. Roch, V. Banks, "A near-real-time global landslide incident reporting tool demonstrator using social media and artificial intelligence," *International Journal of Disaster Risk Reduction (IJDRR)*, 77(1):103089, 2022. https://doi.org/10.1016/j.ijdrr.2022.103089

[23] S. J. Goetz, C. Heaton, M. Imran, Y. Pan, Z. Tian, C. Schmidt, U. Qazi, **F. Ofli**, P. Mitra, "Food insufficiency and Twitter emotions during a pandemic," *Applied Economic Perspectives and Policy (AEPP)*, 1–22, 2022. https://doi.org/10.1002/aepp.13258

[24] R. Sadiq, Z. Akhtar, M. Imran, **F. Ofli**, "Integrating Remote Sensing and Social Sensing for Flood Mapping," *Remote Sensing Applications: Society and Environment (RSASE)*, 25(1):100697, 2022. https://doi.org/10.1016/j.rsase.2022.100697

[25] M. Imran, U. Qazi, **F. Ofli**, "TBCOV: Two Billion Multilingual COVID-19 Tweets with Sentiment, Entity, Geo, and Gender Labels," *Data*, 7(1):8, 2022. https://doi.org/10.3390/data7010008

[26] J. Marin, A. Biswas, **F. Ofli**, N. Hynes, A. Salvador, Y. Aytar, I. Weber, A. Torralba, "Recipe1M+: A Dataset for Learning Cross-Modal Embeddings for Cooking Recipes and Food Images," *Transactions on Pattern Analysis and Machine Intelligence (PAMI)*, 43(1):187–203, 2021. https://doi.org/10.1109/TPAMI.2019.2927476

[27] I. Weber, M. Imran, **F. Ofli**, F. Mrad, J. Colville, M. Fathallah, A. Chaker, W. S. Ahmed, "Non-traditional Data Sources: Providing Insights into Sustainable Development," *Communications of the ACM (CACM)*, 64(4):88–95, 2021. https://doi.org/10.1145/3447739

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[29] M. Imran, **F. Ofli**, D. Caragea, A. Torralba, "Using AI and Social Media Multimodal Content for Disaster Response and Management: Opportunities, Challenges, and Future Directions," *Information Processing and Management (IPM)*, 57(5):102261, 2020. https://doi.org/10.1016/j.ipm.2020.102261

[30] P. Kumar, **F. Ofli**, M. Imran, C. Castillo, "Detection of Disaster-Affected Cultural Heritage Sites from Social Media Images Using Deep Learning Techniques," *ACM Journal on Computing and Cultural Heritage (JOCCH)*, 13(3):23.1-23.31, 2020. https://doi.org/10.1145/3383314

[31] F. Alam, **F. Ofli**, M. Imran, "Descriptive and Visual Summaries of Disaster Events using Artificial Intelligence Techniques: Case Studies of Hurricanes Harvey, Irma, and Maria," *Behavior & Information Technology (BIT)*, 39(3):288-318, 2020. https://doi.org/10.1080/0144929X.2019.1610908

[32] M. I. Lakhal, H. Cevikalp, S. Escalera, **F. Ofli**, "Recurrent Neural Networks for Remote Sensing Image Classification," *IET Computer Vision*, 12(7):1040–1045, 2018. https://doi.org/10.1049/iet-cvi.2017.0420

[33] F. Alam, **F. Ofli**, M. Imran, "Processing Social Media Images by Combining Human and Machine Computing during Crises," *International Journal of Human–Computer Interaction (IJHCI)*, 34(4):311–327, 2018. https://doi.org/10.1080/10447318.2018.1427831

[34] L. Fernandez-Luque, M. Singh, **F. Ofli**, Y. Mejova, I. Weber, M. Aupetit, S. K. Jreige, A. Elmagarmid, J. Srivastava, M. Ahmedna, "Implementing the 360° Quantified Self for Childhood Obesity: A Feasibility Study and Experiences from a Weight Loss Camp in Qatar," *BMC Medical Informatics and Decision Making*, 17(1):1–37, 2017. https://doi.org/10.1186/s12911-017-0432-6

[35] A. Sathyanarayana, S. Joty, L. Fernandez-Luque, **F. Ofli**, J. Srivastava, A. Elmagarmid, T. Arora, S. Taheri, "Sleep Quality Prediction from Wearable Data Using Deep Learning," *JMIR Mhealth Uhealth*, 4(4):e125, 2016. https://doi.org/10.2196/mhealth.6562

[36] **F. Ofli**, P. Meier, M. Imran, C. Castillo, D. Tuia, N. Rey, J. Briant, P. Millet, F. Reinhard, M. Parkan, S. Joost, "Combining Human Computing and Machine Learning to Make Sense of Big (Aerial) Data for Disaster Response," *Big Data*, 4(1):47–59, 2016. https://doi.org/10.1089/big.2014.0064

[37] **F. Ofli**, G. Kurillo, S. Obdrzalek, R. Bajcsy, H. Jimison, M. Pavel, "Design and Evaluation of an Interactive Exercise Coaching System for Older Adults: Lessons Learned," *Journal of Biomedical and Health Informatics (JBHI)*, 20(1):201–212, 2016. https://doi.org/10.1109/JBHI.2015.2391671

[38] **F. Ofli**, R. Chaudhry, G. Kurillo, R. Vidal, R. Bajcsy, "Sequence of the Most Informative Joints (SMIJ): A New Representation for Human Skeletal Action Recognition," *Journal of Visual Communication and Image Representation (JVCI)*, 25(1):24–38, 2014. https://doi.org/10.1016/j.jvcir.2013.04.007 **Best Paper Award 2015.**

[39] **F. Ofli**, E. Erzin, Y. Yemez, A. M. Tekalp, "Learn2Dance: Learning Statistical Music-to-Dance Mappings for Choreography Synthesis," *Transactions on Multimedia (TMM)*, 14(3):747–759, 2012. https://doi.org/10.1109/TMM.2011.2181492

[40] **F. Ofli**, C. Canton-Ferrer, Y. Demir, K. Balcı, J. Tilmanne, E. Bozkurt, I. Kızoğlu, Y. Yemez, E. Erzin, A. M. Tekalp, L. Akarun, A. T. Erdem, "An Audio-Driven Dancing Avatar," *Journal on Multimodal User Interfaces (JMUI)*, 2(2):93–103, 2008. https://doi.org/10.1007/s12193-008-0009-x

International Conference Papers

[41] A. M. Al-Mohannadi, A. Firoz, Y. Yang, M. Imran, **F. Ofli**, "DisasterVQA: A Visual Question Answering Benchmark Dataset for Disaster Scenes," *ICWSM*, May 2026.

[42] S. A. Al-Emadi, Y. Yang, **F. Ofli**, "Benchmarking Object Detectors under Real-World Distribution Shifts in Satellite Imagery," *CVPR*, Jun 2025.

[43] A. E. F. Zguir, **F. Ofli**, M. Imran, "Detecting Actionable Requests and Offers on Social Media During Crises Using LLMs," *ISCRAM*, May 2025.

[44] M. Imran, A. W. Ziaullah, K. Chen, **F. Ofli**, "Evaluating Robustness of LLMs on Crisis-Related Microblogs across Events, Information Types, and Linguistic Features," *WWW*, Apr 2025.

[45] A. W. Ziaullah, **F. Ofli**, M. Imran, "Monitoring Critical Infrastructure Facilities During Disasters Using Large Language Models," *ISCRAM*, May 2024.

[46] Z. Akhtar, U. Qazi, A. El-Sakka, R. Sadiq, **F. Ofli**, M. Imran, "Flood Insights: Integrating Remote and Social Sensing Data for Flood Exposure, Damage, and Urgent Needs Mapping," *AAAI*, Feb 2024. **Deployed Application Award.**

[47] **F. Ofli**, I. Maduako, M. Fatehkia, J. Lucas, A. N. Thaw, M. A. Sadeghi, S. Chawla, D.-H. Kim, "SchoolFinder: An AI-Assisted System for Localizing Schools from Satellite Imagery – Case Study of Sudan," *KDD-W*, Aug 2023.

[48] Z. Akhtar, U. Qazi, R. Sadiq, A. El-Sakka, M. Sajjad, **F. Ofli**, M. Imran, "Mapping Flood Exposure, Damage, and Population Needs Using Remote and Social Sensing: A Case Study of 2022 Pakistan Floods," *WWW*, May 2023.

[49] **F. Ofli**, U. Qazi, M. Imran, J. Roch, C. Pennington, V. Banks, R. Bossu, "A Real-time System for Detecting Landslide Reports on Social Media using Artificial Intelligence," *ICWE*, Jul 2022.

[50] D. Papadopoulos, E. Mora, N. Chepurko, K. W. Huang, **F. Ofli**, A. Torralba, "Learning Program Representations for Food Images and Cooking Recipes," *CVPR*, Jun 2022. **Oral.**

[51] M. Imran, U. Qazi, **F. Ofli**, S. Peterson, F. Alam, "AI for Disaster Rapid Damage Assessment from Microblogs," *AAAI*, Feb 2022.

[52] S. Akti, **F. Ofli**, M. Imran, H. K. Ekenel "Fight Detection from Still Images in the Wild," *WACV-W*, Jan 2022.

[53] B. Kellenberger, J. E. Vargas-Muñoz, D. Tuia, R. C. Daudt, K. Schindler, T. T.-T. Whelan, B. Ayo, **F. Ofli**, M. Imran, "Mapping Vulnerable Populations with AI," *KDD-W*, Aug 2021.

[54] F. Alam, U. Qazi, M. Imran, **F. Ofli**, "HumAID: Human-Annotated Disaster Incidents Data from Twitter with Deep Learning Benchmarks," *ICWSM*, Jun 2021.

[55] F. Alam, H. Sajjad, M. Imran, **F. Ofli**, "CrisisBench: Benchmarking Crisis-related Social Media Datasets for Humanitarian Information Processing," *ICWSM*, Jun 2021.

[56] Z. Akhtar, **F. Ofli**, M. Imran, "Towards Using Remote Sensing and Social Media Data for Flood Mapping," *ISCRAM*, May 2021.

[57] F. Alam, **F. Ofli**, M. Imran, T. Alam, U. Qazi, "Deep Learning Benchmarks and Datasets for Social Media Image Classification for Disaster Response," *ASONAM*, Dec 2020.

[58] E. Weber, N. Marzo, D. Papadopoulos, A. Biswas, A. Lapedriza, **F. Ofli**, M. Imran, A. Torralba, "Detecting natural disasters, damage, and incidents in the wild," *ECCV*, Aug 2020.

[59] M. Fatehkia, B. Coles, **F. Ofli**, I. Weber, "The Relative Value of Facebook Advertising Data for Poverty Mapping," *ICWSM*, Jun 2020.

[60] **F. Ofli**, F. Alam, M. Imran, "Analysis of Social Media Data using Multimodal Deep Learning for Disaster Response," *ISCRAM*, May 2020.

[61] M. Imran, F. Alam, U. Qazi, S. Peterson, **F. Ofli**, "Rapid Damage Assessment Using Social Media Images by Combining Human and Machine Intelligence," *ISCRAM*, May 2020. **Best Paper Award.**

[62] D. Papadopoulos, Y. Tamaazousti, **F. Ofli**, I. Weber, A. Torralba, "How to Make a Pizza: Learning a Compositional Layer-based GAN Model," *CVPR*, Jun 2019.

[63] X. Li, D. Caragea, C. Caragea, M. Imran, **F. Ofli**, "Identifying Disaster Damage Images Using a Domain Adaptation Approach," *ISCRAM*, May 2019. **Best Insight Paper Award.**

[64] F. Alam, M. Imran, **F. Ofli**, "CrisisDPS: Crisis Data Processing Services," *ISCRAM*, May 2019. **Best Paper Award Runner-up.**

[65] E. Kocabey, **F. Ofli**, J. Marin, A. Torralba, I. Weber, "Using Computer Vision to Study the Effects of BMI on Online Popularity and Weight-Based Homophily," *SocInfo*, Sep 2018.

[66] F. Alam, **F. Ofli**, M. Imran, "CrisisMMD: Multimodal Twitter Datasets from Natural Disasters," *ICWSM*, June 2018.

[67] F. Alam, **F. Ofli**, M. Imran, M. Aupetit, "A Twitter Tale of Three Hurricanes: Harvey, Irma, and Maria," *ISCRAM*, May 2018.

[68] N. Attari, **F. Ofli**, M. Hasan, J. Lucas, S. Chawla, "Nazr-CNN: Fine-Grained Classification of UAV Imagery for Damage Assessment," *DSAA*, Oct 2017.

[69] D. T. Nguyen, **F. Ofli**, M. Imran, P. Mitra, "Damage Assessment from Social Media Imagery Data During Disasters," *ASONAM*, Aug 2017.

[70] F. Alam, M. Imran, **F. Ofli**, "Image4Act: Online Social Media Image Processing for Disaster Response," *ASONAM*, Aug 2017.

[71] A. Salvador, N. Hynes, Y. Aytar, J. Marin, **F. Ofli**, I. Weber, A. Torralba, "Learning Cross-modal Embeddings for Cooking Recipes and Food Images," *CVPR*, Jul 2017.

[72] D. T. Nguyen, F. Alam, **F. Ofli**, M. Imran, "Automatic Image Filtering on Social Networks Using Deep Learning and Perceptual Hashing During Crises," *ISCRAM*, May 2017. **Best Paper Award Runner-up.**

[73] E. Kocabey, M. Camurcu, **F. Ofli**, Y. Aytar, J. Marin, A. Torralba, I. Weber, "Face-to-BMI: Using Computer Vision to Infer Body Mass Index on Social Media," *ICWSM*, May 2017.

[74] **F. Ofli**, Y. Aytar, I. Weber, R. al Hammouri, A. Torralba, "Is Saki #delicious? The Food Perception Gap on Instagram and Its Relation to Health," *WWW*, Apr 2017.

[75] A. Sathyanarayana, **F. Ofli**, L. Fernandez-Luque, J. Srivastava, A. Elmagarmid, T. Arora, S. Taheri, "Robust Automated Human Activity Recognition and its Application to Sleep Research," *ICDM-W*, Dec 2016.

[76] H. Haddadi, **F. Ofli**, Y. Mejova, I. Weber, J. Srivastava, "360-degree Quantified Self," *ICHI*, Oct 2015.

[77] Q. Wang, G. Kurillo, **F. Ofli**, R. Bajcsy, "Evaluation of Pose Tracking Accuracy in the First and Second Generations of Microsoft Kinect," *ICHI*, Oct 2015.

[78] Q. Wang, G. Kurillo, **F. Ofli**, R. Bajcsy, "Unsupervised Temporal Segmentation of Repetitive Human Actions Based on Kinematic Modeling and Frequency Analysis," *3DV*, Oct 2015.

[79] G. Kurillo, **F. Ofli**, J. Marcoe, P. Gorman, H. Jimison, M. Pavel, R. Bajcsy, "Multi-disciplinary Design and In-Home Evaluation of Kinect-Based Exercise Coaching System for Elderly," *HCI International*, Aug 2015.

[80] R. Chaudhry, **F. Ofli**, G. Kurillo, R. Bajcsy, R. Vidal, "Bio-inspired Dynamic 3D Discriminative Skeletal Features for Human Action Recognition," *CVPR-W*, Jun 2013.

[81] **F. Ofli**, R. Chaudhry, G. Kurillo, R. Vidal, R. Bajcsy, "Berkeley MHAD: A Comprehensive Multimodal Human Action Database," *WACV*, Jan 2013.

[82] Š. Obdržálek, G. Kurillo, **F. Ofli**, R. Bajcsy, E. Seto, H. Jimison, M. Pavel, "Accuracy and Robustness of Kinect Pose Estimation in the Context of Coaching of Elderly Population," *EMBC*, Aug 2012.

[83] **F. Ofli**, R. Chaudhry, G. Kurillo, R. Vidal, R. Bajcsy, "Sequence of the Most Informative Joints (SMIJ): A New Representation for Human Skeletal Action Recognition," *CVPR-W*, Jun 2012.

[84] **F. Ofli**, E. Erzin, Y. Yemez, A. M. Tekalp, "Multi-modal Analysis of Dance Performances for Music-Driven Choreography Synthesis," *ICASSP*, Mar 2010.

[85] **F. Ofli**, E. Erzin, Y. Yemez, A. M. Tekalp, Ç. E. Erdem, A. T. Erdem, T. Abacı, M. K. ́Ozkan, "Unsupervised Dance Figure Analysis from Video for Dancing Avatar Animation," *ICIP*, Oct 2008.

[86] **F. Ofli**, C. Canton-Ferrer, J. Tilmanne, Y. Demir, E. Bozkurt, Y. Yemez, E. Erzin, A. M. Tekalp, "Audio-Driven Human Body Motion Analysis and Synthesis," *ICASSP*, Apr 2008.

[87] **F. Ofli**, Y. Demir, E. Erzin, Y. Yemez, A. M. Tekalp, "Multicamera Audio-Visual Analysis of Dance Figures Using Segmented Body Model," *EUSIPCO*, Sep 2007.

[88] **F. Ofli**, E. Erzin, Y. Yemez, A. M. Tekalp, "Estimation and Analysis of Facial Animation Parameter Patterns," *ICIP*, Sep 2007.

[89] **F. Ofli**, Y. Demir, E. Erzin, Y. Yemez, A. M. Tekalp, "Multicamera Audio-Visual Analysis of Dance Figures," *ICME*, Jul 2007.

[90] M. E. Sargın, O. Aran, A. Karpov, **F. Ofli**, Y. Yasinnik, S. Wilson, E. Erzin, Y. Yemez, A. M. Tekalp, "Combined Gesture-Speech Analysis and Speech Driven Gesture Synthesis," *ICME*, Jul 2006.

Refereed National Conference Papers

[91] **F. Ofli**, E. Erzin, Y. Yemez, A. M. Tekalp, "Multimodal Dance Choreography Model," *SIU*, Apr 2011. **Alper Atalay Best Student Paper Award Runner-up.**

[92] **F. Ofli**, Y. Demir, C. Canton-Ferrer, J. Tilmanne, K. Balcı, E. Bozkurt, I. Kızoğlu, Y. Yemez, E. Erzin, A. M. Tekalp, L. Akarun, A. T. Erdem, "Analysis and Synthesis of Multiview Audio-Visual Dance Figures," *SIU*, Apr 2008.

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Non-Refereed Workshop Papers

[96] **F. Ofli**, C. Canton-Ferrer, Y. Demir, K. Balcı, J. Tilmanne, E. Bozkurt, I. Kızoğlu, Y. Yemez, E. Erzin, A. M. Tekalp, L. Akarun, A. T. Erdem, "Audio-Driven Human Body Motion Analysis and Synthesis," *eNTERFACE*, Jul 2007.

[97] T. Dutoit, A. Holzapfel, M. Jottrand, A. Moneit, **F. Ofli**, J. Pérez, F. Marqués, Y. Stylianou, "Multimodal Speaker Conversion - his master's voice... and face -," *eNTERFACE*, Jul 2006.

[98] M. E. Sargın, **F. Ofli**, Y. Yasinnik, O. Aran, A. Karpov, S. Wilson, E. Erzin, Y. Yemez, A. M. Tekalp, "Combined Gesture-Speech Analysis and Synthesis," *eNTERFACE*, Jul 2005.

Datasets & Softwares

DisasterVQA: A Visual Question Answering Benchmark Dataset for Disaster Scenes
Online: https://zenodo.org/records/18267770 *since* 2026
DisasterVQA is a novel benchmark and evaluation dataset tailored to perception and reasoning tasks in crisis contexts. The dataset comprises 1,395 real-world images and 4,405 expert-curated image-question-answer triplets spanning diverse events, including floods, wildfires, and earthquakes. Grounded in established humanitarian frameworks such as FEMA ESF and OCHA MIRA, the dataset includes binary, multiple-choice, and open-ended questions covering situational awareness and actionable response tasks, built environment damage, population exposure, accessibility, and movement restrictions. DisasterVQA provides a challenging and practical benchmark to guide the development of more robust and operationally meaningful vision-language models for disaster response.

RWDS: Benchmarking Object Detectors under Real-World Distribution Shifts in Satellite Imagery
Online: https://github.com/RWGAI/RWDS *since* 2025

Real-World Distribution Shifts (RWDS) is a suite of five novel domain generalization (DG) benchmarking datasets focused on humanitarian and climate change applications. By capturing distribution shifts across climate zones, disaster types, specific events, and geographic regions, RWDS addresses a critical gap in existing benchmarks that lack real-world complexity. As the first DG benchmark tailored for object detection in high-impact contexts, it provides a rigorous framework for evaluating the robustness and generalization of future computer vision models in unpredictable environments.

DSGR: Analysing Satellite Imagery Classification under Spatial Domain Shift across Geographic Regions

Online: https://rwgai.com/dsgr/ *since* 2025

Domain Shift across Geographic Regions (DSGR) is a novel large-scale dataset designed to model spatial domain shifts in satellite imagery. By treating geographic regions as distinct domains, DSGR addresses the lack of geospatial diversity in current datasets and more accurately reflects real-world deployment challenges. It provides a systematic benchmarking platform for evaluating image classification and domain generalization techniques in both single- and multi-source scenarios, focusing on enhancing model robustness across the globe.

VME: A Satellite Imagery Dataset and Benchmark for Detecting Vehicles in the Middle East and Beyond

Online: https://zenodo.org/records/14185684 *since* 2024

The Vehicles in the Middle East (VME) dataset is specifically designed for vehicle detection in high-resolution satellite imagery from Middle Eastern countries. Sourced from Maxar, VME covers 54 cities across 12 countries and includes over 4,000 image tiles with more than 100,000 vehicle annotations, generated through a combination of manual and semi-automated labeling. The VME dataset is coupled with the Car Detection in Satellite Imagery (CDSI) dataset, the largest benchmark to date for this task, which aggregates images from multiple sources to support robust and globally scalable car detection.

BAFMD: Bias-Aware Face Mask Detection Dataset

Online: https://github.com/Alpkant/BAFMD *since* 2022

The Bias-Aware Face Mask Detection (BAFMD) dataset is a novel face mask detection dataset that contains images posted on Twitter (now X) during the pandemic from around the world. Unlike previous datasets, the BAFMD dataset contains more images from underrepresented race and age groups to mitigate the problem for the face mask detection task.

Incidents1M: A Dataset for Detecting Natural Disasters, Damage, and Incidents in the Wild

Online: http://incidentsdataset.csail.mit.edu/ *since* 2020

The Incidents Dataset consists of 446,684 scene-centric images annotated by humans as positive for natural disasters (class-positives), types of damage or specific events that can require human attention or assistance, like traffic jams or car accidents. The term *incidents* is used to refer to the 43 categories covered by the dataset. The dataset also contains an additional set of 697,464 images annotated by humans as negatives for specific incident categories (class-negatives), which prove useful for training more robust models. The Incidents Dataset is significantly larger, more complete, and much more diverse than any other dataset related to incident detection in scene-centric images.

MEDIC: A Multi-Task Learning Dataset for Disaster Image Classification

Online: https://crisisnlp.qcri.org/medic/ *since* 2022

The MEDIC dataset is the largest social media image classification dataset for humanitarian response consisting of 71,198 images to address four different tasks in a multi-task learning setup including disaster type prediction, informativeness classification, humanitarian categorization, and damage severity assessment. This is the first dataset of its kind combining social media images, disaster response, and multi-task learning research. An important property of this dataset is its high potential to facilitate research on multi-task learning, which recently receives much interest from the machine learning community and has shown remarkable results in terms of memory, inference speed, performance, and generalization capability.

TBCOV: Two Billion Multilingual COVID-19 Tweets with Sentiment, Entity, Geo, and Gender Labels

Online: https://crisisnlp.qcri.org/tbcov *since* 2022

The TBCOV dataset comprises more than two billion multilingual tweets related to the COVID-19 pandemic. Specifically, TBCOV offers 2,014,792,896 tweets collected using more than 800 multilin-

gual keywords over a 14-month period from Feb 1st, 2020 till Mar 31st, 2021. These tweets span 67 languages, posted by 87 million unique users across 218 countries worldwide. Several state-of-the-art machine learning methods were employed to annotate tweets with a number of important latent attributes such as sentiment polarity, named-entities, geolocation, user type, and gender.

GeoCoV19: A Dataset of Hundreds of Millions of Multilingual COVID-19 Tweets with Location Information
Online: https://crisisnlp.qcri.org/covid19 *since* 2020
GeoCoV19 is a large-scale dataset containing more than 524 million multilingual tweets collected between Feb 1–May 1, 2020. The dataset contains around 378K geotagged tweets and 5.4 million tweets with Place information. We extract toponyms from the user location field and tweet content and resolve them to geolocations such as country, state, and city. This results in 297 million tweets annotated with geolocation based on user location field and 452 million tweets based on tweet content.

CrisisMMD: Multimodal Twitter Datasets from Natural Disasters
Online: http://crisisnlp.qcri.org/crisismmd *since* 2018
Online: https://dataverse.mpi-sws.org/dataverse/icwsm18
The CrisisMMD multimodal Twitter dataset consists of several thousands of manually annotated tweets and images collected during seven major natural disasters including earthquakes, hurricanes, wildfires, and floods that happened in the year 2017 across different parts of the World. As the first and largest multimodal dataset published for research community in the crisis response and management domain, CrisisMMD contains three types of annotations, i.e., informative/not–informative classification, humanitarian categorization, and damage severity assessment.

Recipe1M+: A Dataset for Learning Cross-Modal Embeddings for Cooking Recipes and Food Images
Online: http://pic2recipe.csail.mit.edu/ *since* 2017
Recipe1M is a new large-scale, structured corpus of over one million cooking recipes and 13 million food images. As the largest publicly available collection of recipe data, Recipe1M affords the ability to train high-capacity models on aligned, multi-modal data.

Berkeley MHAD: A Comprehensive Multimodal Human Action Database
Online: http://tele-immersion.citris-uc.org/berkeley_mhad/ *since* 2012
The Berkeley Multimodal Human Action Database (MHAD) consists of temporally synchronized and geometrically calibrated data from an optical motion capture system, multi- baseline stereo cameras from multiple views, depth sensors, accelerometers and microphones. It contains 11 actions performed by 7 male and 5 female subjects in the range 23-30 years of age except for one elderly subject. All the subjects performed 5 repetitions of each action, yielding about 660 action sequences which correspond to about 82 minutes of total recording time.

An Interactive Exercise Coaching System for the Elderly
Online: http://tele-immersion.citris-uc.org/remote_coaching_of_elderly *since* 2011
This Kinect-based automated interactive exercise coaching system guides users through a series of video exercises, tracks and measures their movements, provides real-time feedback, and records their performance over time. The system consists of exercises to improve balance, flexibility, strength and endurance, with the aim of reducing fall risk and improving performance of daily activities for the elderly.

MVGL-MASAL: Story Telling Audio-Visual Database
Online: https://mvgl.ku.edu.tr/databases/ *since* 2005
The MVGL-MASAL is a gesture-speech database. The database includes four recordings of a single subject telling stories in Turkish. Each story is approximately 7 minutes long and the total duration of the database is 27 min and 45 seconds. The audio-visual data is synchronously captured from the stereo camera and sound card. The stereo video includes only upper body gestures with 30 frames per second whereas the audio is recorded with 16 kHz sampling rate and 16 bits per sample.

Employment

Hamad Bin Khalifa University, Doha, Qatar 09/2015 – present
Principal Scientist in the Qatar Computing Research Institute
I continue to contribute QCRI's mission by leading impactful research projects in the AI for Social Good space, fostering collaboration with humanitarian stakeholders, and mentoring junior researchers. Stakeholder engagements include United Nations Development Programme (UNDP), World Food Programme (WFP), International Federation of Red Cross and Red Crescent Societies

(IFRC), Qatar Red Crescent Society (QRCS), Internal Displacement Monitoring Centre (iDMC), among others.

Hamad Bin Khalifa University, Doha, Qatar 12/2019 – 08/2025
Senior Scientist in the Qatar Computing Research Institute
I was involved in various humanitarian projects ranging from social media image analysis for damage assessment and disaster response to satellite imagery analysis for poverty mapping, internal displacement, and climate adaptation. Stakeholder engagements included United Nations Development Programme (UNDP), United Nations Children's Fund (UNICEF), United Nations Economic and Social Commission for West Asia (UN ESCWA), Internal Displacement Monitoring Centre (iDMC), European-Mediterranean Seismological Centre (EMSC), British Geological Survey (BGS), Education Above All (EAA), among others.

Hamad Bin Khalifa University, Doha, Qatar 04/2014 – 11/2019
Scientist in the Qatar Computing Research Institute
With several colleagues, I worked on two projects in parallel:

- Crisis Computing: Applying computer vision and machine learning techniques on large collections of social media images as well as aerial (UAV) images captured at disaster-hit locations for automated damage assessment and disaster response.
- Health Informatics: Building an architecture for holistic view of individuals' health using rich data available from online social networks, wearable devices, mobile apps, and electronic health records. Particular emphasis on understanding of food images and recipes collected from online resources and social media platforms.

University of California, Berkeley, Berkeley, CA 09/2010 – 04/2014
Postdoctoral Researcher in the Teleimmersion Lab
With Professor Ruzena Bajcsy, I worked on human activity understanding from multi-sensory data:

- Collected a multimodal human action database (released as "Berkeley MHAD") consisting of temporally synchronized and geometrically calibrated data from an optical motion capture system, multi-view multi-baseline camera arrays, depths sensors, accelerometers and microphones.
- Developed a new representation of human actions called Sequence of the Most Informative Joints (SMIJ) and demonstrated on multiple datasets that the SMIJ representation outperforms several state-of-the-art algorithms in human action recognition.
- Contributed to the design and development of a Microsoft Kinect-based physical exercise system for remote coaching of the elderly population.

Koç University, Istanbul, Turkey 10/2005 – 08/2010
Graduate Research Assistant in the Multimedia, Vision and Graphics Lab
With Professors A. Murat Tekalp, Ýucel Yemez and Engin Erzin, I worked on various multimedia signal processing tasks:

- Developed a framework for learning many-to-many statistical mappings from musical primitives (*i.e.,* musical measures) to dance motion primitives (*i.e.,* dance figures) towards generating plausible alternative music-driven dance choreographies via hidden Markov models (HMM).
- Worked on audiovisual facial expression analysis using facial animation parameters (FAP) with active appearance models (AAM) for speech-driven facial expression synthesis and animation.

Research Experiences

eNTERFACE'07: The SIMILAR NoE Summer Workshop on Multimodal Interfaces,
Boğaziçi University, Istanbul, Turkey 07/2007 – 08/2007
Project Leader and Researcher in "Audio-Driven Human Body Motion Analysis" project
Worked on body motion capture and audio-driven human body motion synthesis and animation tasks. Projects results were presented in ICASSP'08 and JMUI'08.

eNTERFACE'06: The SIMILAR NoE Summer Workshop on Multimodal Interfaces,
University of Zagreb, Dubrovnik, Croatia 07/2006 – 08/2006
Researcher in "Multimodal Character Morphing" project
Worked on face detection, tracking and extraction of facial key points for analysis and animation of facial mimics on a talking avatar.

The SIMILAR NoE Graduate Twinning Program,
Polytechnic University of Catalonia, Barcelona, Spain 06/2006 – 07/2006
Visiting Researcher in Image Processing Group
Worked on multicamera calibration, data acquisition and body motion analysis under supervision of

Professors Ferran Marques and Josep Ramon Casas. Also investigated deinterlacing algorithms on the acquired data to improve the video quality for the body motion analysis task.

eNTERFACE'05: The SIMILAR NoE Summer Workshop on Multimodal Interfaces,
Polytechnic Faculty of Mons, Mons, Belgium 07/2005 – 08/2005
Researcher in "Combined Gesture-Speech Analysis" project
Developed a graphical tool for upper body animation. Project results were presented in ICME'06.

Summer Camp on Analog and Digital Circuit Design,
STMicroelectronics, Istanbul, Turkey 07/2004 – 09/2004
Research Intern
Developed team projects on analog and digital design of microelectronic circuits, i.e., analog design of an inverter and digital design of an alarm clock. Wrote 160-page long report on this internship.

Teaching Experiences

Koç University, Istanbul, Turkey 10/2005 – 08/2010
Graduate Teaching Assistant in College of Engineering
Taught in problem sessions; prepared and graded assignments, quizzes and projects of the courses:

- Digital Signal Processing; Spring 10
- Signals and Systems; Fall 06, 07, 08, 09, 10
- Digital Image and Video Processing; Spring 07, 08, 09
- Computer Graphics; Spring 07
- Database Management Systems; Spring 06
- Structure and Interpretation of Computer Programs; Fall 05

Invited Talks

[1] Advancing Geospatial AI for Real-World Challenges.
GAIA 2025 Symposium, Institute for Computer Science, Artificial Intelligence and Technology (INSAIT), Sofia, Bulgaria, September 2025. (website)

[2] AI and Non-Traditional Data for Social Good.
4th Annual Nepal AI School (ANAIS), Nepal Applied Mathematics and Informatics Institute for Research (NAAMII), Online, May 2023.

[3] Integrating Remote Sensing and Social Sensing for Disaster Response.
GIS Technology Day, The Centre for GIS (CGIS), Doha, Qatar, May 2023.

[4] Inferring Roads and Counting Cars from Space.
GIS Technology Day, The Centre for GIS (CGIS), Doha, Qatar, May 2022.

[5] Disaster Image Analysis.
iMMAP 3rd Humanitarian Innovation Event – Technologies for Decision-Making in Humanitarian Context, iMMAP Colombia, Online, March 2022. (video)

[6] AIDR: Artificial Intelligence for Digital Response.
Global Symposium on Artifical Intelligence in Governance and Disaster Response, Special Centre for Disaster Research, Jawaharlal Nehru University, New Delhi, India, March 2019.

[7] Crisis Computing at QCRI.
Artificial Intelligence for Social Good Workshop, Qatar Center for Artificial Intelligence & United Nations Development Programme, Doha, Qatar, February 2019. (video)

[8] Using Computer Vision to Understand Food and Monitor Agriculture.
Artificial Intelligence and Food Security Workshop, Qatar Center for Artificial Intelligence, Doha, Qatar, October 2018.

[9] Using Aerial and Social Media Images for Augmenting Official Statistics.
2nd Workshop on Modernization of Official Statistics in the State of Qatar, Ministry of Development Planning and Statistics, Doha, Qatar, September 2018.

[10] Artificial Intelligence for Digital Response – Automatic Image Processing.
Workshop on Using Aerial and Social Media Images for Humanitarian Aid, Qatar Computing Research Institute, Doha, Qatar, June 2018.

[11] Using Aerial and Social Media Images for Humanitarian Aid.
Experts Meeting: Aerial AI and Big Data, swissnex Boston & WeRobotics & MIT Solve, Cambridge, MA, USA, May 2018.

[12] Understanding Health Habits from Social Media Pictures.
Graduate Seminar, Hamad Bin Khalifa University, Doha, Qatar, November 2017.

[13] Real-time Image Processing on Social Media during Crisis Events.
Invited Talk, The Fourth Machine Learning and Data Analytics (MLDAS) Symposium, Doha, Qatar, March 2017.

[14] Design and Evaluation of an Interactive Exercise Coaching System for the Elderly.
Invited Talk, Geriatric Conference of Middle East Academy for Medicine of Ageing, Doha, Qatar, March 2015.

[15] Human Motion Analysis in the Interplay of Multimodality, Representation and Learning.
Seminar, Viterbi School of Engineering, USC, Los Angeles, CA, USA, April 2013.

[16] Human Motion Analysis in the Interplay of Multimodality, Representation and Learning.
Seminar, Sony Computer Entertainment America, Foster City, CA, USA, March 2013.

[17] Multimodal Analysis of Dance Performances for Music-Driven Choreography Synthesis.
Berkeley Institute of Design Seminar, UC Berkeley, Berkeley, CA, USA, April 2012.

[18] A Multimodal System for Human Movement Acquisition.
Graphics/Vision Lunch Seminar, UC Berkeley, Berkeley, CA, USA, October 2011.

[19] Music/Figure Correlation Analysis Towards Music-Driven Dance Choreography Synthesis.
COST2102 International School on Development of Multimodal Interfaces: Active Listening and Synchrony, Trinity College, Dublin, Ireland, March 2009.

[20] Prosody-Driven Head Gesture Analysis and Synthesis.
COST2102 International Workshop on Verbal and Non-verbal Communication Behaviors, The Second University of Naples, Vietri sul Mare, Italy, March 2007.

[21] Estimation and Analysis of Facial Animation Parameter Patterns.
COST2102 International Workshop on Verbal and Non-verbal Communication Behaviors, The Second University of Naples, Vietri sul Mare, Italy, March 2007.

[22] Multicamera Motion Capture for Articulated Body Model Animation.
The SIMILAR NoE Industry Day, Brussels, Belgium, December 2006.

[23] Prosody-Driven Head Gesture Synthesis.
The SIMILAR NoE Industry Day, Brussels, Belgium, December 2006.

Skills

Programming Languages: C/C++, Java, Fortran, Python, Lisp, Scheme, Perl, VHDL.

Libraries: PyTorch, Tensorflow, OpenCV, OpenGL, GSL, Open Inventor, Coin3D, HTK, Latex.

Tools: MS Visual Studio, MATLAB, Eclipse, MySQL, PhaseSpace Impulse Motion Capture System, IO Industries Streams, Microsoft Kinect, Autodesk MotionBuilder, Adobe Premiere, XFace.

Operating Systems: MS Windows, Unix/Linux, Mac OS.

Professional Activities

Member: IEEE S'07–M'11–SM'18, ACM M'10–SM'18, AAAI M'21.

PC/SPC/AC/TC/Organizer/Editor:

- (SPC) *AAAI Conference on Artificial Intelligence*, AAAI 2026
- (AC) *International Conference on Image Processing*, ICIP 2025
- (SPC) *AAAI Conference on Artificial Intelligence*, AAAI 2025
- (TC) *EarthVision: Workshop on Large-Scale Computer Vision for Remote Sensing Imagery*, CVPR 2025
- (AC) *International Conference on Image Processing*, ICIP 2024
- (SPC) *AAAI Conference on Artificial Intelligence*, AAAI 2024
- (TC) *EarthVision: Workshop on Large-Scale Computer Vision for Remote Sensing Imagery*, CVPR 2024
- (AC) *International Conference on Image Processing*, ICIP 2023
- (SPC) *AAAI Conference on Artificial Intelligence*, AAAI 2023
- (Editor) *Book Section on Emerging Technologies and Innovative Applications of AI in DRR*, International Handbook on Disaster Research (Springer Nature) 2023
- (AC) *International Conference on Image Processing*, ICIP 2022
- (SPC) *AAAI Conference on Artificial Intelligence*, AAAI 2022
- (TC) *EarthVision: Workshop on Large-Scale Computer Vision for Remote Sensing Imagery*, CVPR 2022
- (Organizer) *FG4COVID19: The International Workshop on Face and Gesture Analysis for COVID-19*, FG 2021
- (AC) *International Conference on Image Processing*, ICIP 2021

- (TC) *EarthVision: Workshop on Large-Scale Computer Vision for Remote Sensing Imagery*, CVPR 2021
- (PC) *DECOR: Third International Workshop on Data Engineering Meets Intelligent Food and Cooking Recipes*, ICDE 2021
- (Editor) *Special Issue on Using AI and Social Media for Disaster Response and Management*, Elsevier Journal on Information Processing & Management (IPM) 2020
- (AC) *International Conference on Image Processing*, ICIP 2020
- (TC) *EarthVision: Workshop on Large-Scale Computer Vision for Remote Sensing Imagery*, CVPR 2020
- (PC) *DECOR: Third International Workshop on Data Engineering Meets Intelligent Food and Cooking Recipes*, ICDE 2020
- (PC) *Health on the Web Track*, WWW 2020
- (TC) *CVGC: Computer Vision for Global Challenges Workshop*, CVPR 2019
- (TC) *EarthVision: Workshop on Large-Scale Computer Vision for Remote Sensing Imagery*, CVPR 2019
- (PC) *DECOR: Second International Workshop on Data Engineering Meets Intelligent Food and Cooking Recipes*, ICDE 2019
- (PC) *DeepGlobe: A Challenge for Parsing the Earth through Satellite Images*, CVPR 2018
- (TC) *EarthVision: Workshop on Large-Scale Computer Vision for Remote Sensing Imagery*, CVPR 2017

Reviewer:

- IEEE Transactions on Pattern Analysis and Machine Intelligence; IEEE Transactions on Image Processing; IEEE Transactions on Multimedia; IEEE Transactions on Visualization and Computer Graphics; IEEE Transactions on Audio, Speech, and Language Processing; IEEE Transactions on Circuits and Systems for Video Technology; IEEE Transactions on Human-Machine Systems; IEEE Multimedia; IEEE Intelligent Systems; IEEE Journal of Biomedical and Health Informatics; IEEE Transactions on Emerging Topics in Computing; IEEE Transactions on Image Processing; IEEE Transactions on Affective Computing; IEEE Access; Computer Vision and Image Understanding (Elsevier); Journal of Visual Communication and Image Representation (Elsevier); Pattern Recognition (Elsevier); Image and Vision Computing (Elsevier); Signal Processing: Image Communication (Elsevier); Computer Methods and Programs in Biomedicine (Elsevier); Information Processing and Management (Elsevier); International Journal of Disaster Risk Reduction (Elsevier); ISPRS Journal of Photogrammetry and Remote Sensing (Elsevier); Machine Vision and Applications (Springer); The Visual Computer (Springer); Signal, Image and Video Processing (Springer); Natural Hazards (Springer); EPJ Data Science (Springer); IET Computer Vision; Journal of Electronic Imaging (SPIE); Disaster Medicine and Public Health Preparedness (Cambridge); ACM Transactions on the Web;
- IEEE/CVF Conference on Computer Vision and Pattern Recognition; International Conference on Computer Vision; European Conference on Computer Vision; Neural Information Processing Systems; IEEE Winter Conference on Applications of Computer Vision; AAAI Conference on Artificial Intelligence; The Web Conference; International Conference on Information Systems for Crisis Response and Management; International Symposium on Computer and Information Sciences; Affective Computing and Intelligent Interaction; Image, Video, Multidimensional Signal Processing; International Conference on Computing, Networking and Communications; International Conference on Medical Image Computing and Computer Assisted Intervention; IEEE Signal Processing and Communications Applications Conference.

Advising & Mentorship

Postdoc (Official): Marie-Christine Rufener (2022-2023), Rizwan Sadiq (2021-2023), Firoj Alam (2018-2019), Youssef Tamaazousti (2018-2019)

Postdoc (External): Dim Papadopoulos (2018-2021), Javier Marin (2017-2018), Yusuf Aytar (2015-2017)

PhD (Official): Aisha Al-Mohannadi (*Qatari*, 2023-present), Sara Al-Emadi (*Qatari*, 2022-2025), Noora Al-Emadi (*Qatari*, 2021-2026)

MS (Official): Fatma AlNaimi (*Qatari*, 2020-2022)

MS (External): Ethan Weber (2019-2021), Alperen Kantarci (2020-2021), Seymanur Akti (2020-2021), Nadiia Chepurko (2020), Aritro Biswas (2017-2019), Nuria Marzo Grimalt (2017-2019)

RA: Moamin Ibrahim (2026-present), Ahmed Zguir (2025-present), Mahima Aggarwal (2024-2025), Keivin Isufaj (2023-2025), Abdul Wahab Ziaullah (2023-2024), Masoomali Fatehkia (2022-2023), Aya Elsaqa (2022-2023), Zainab Akhtar (2021-2023), Umair Qazi (2019-2023), Raggi al Hammouri (2016-2020), Enes Kocabey (2017), Firoj Alam (2016-2018), Dat Tien Nguyen (2016-2017), Aarti Sathyanarayana (2016-2017), Nazia Attari (2015-2017), Nicolas Rey (2015)

Interns: Alexander Gao (2025), Zara Hommez (2025), Abdallah Abdaljalil (2025), Hiba Hamad (2025), Andrew Yang (2023), Maryam Khalid (2022), Sumaya Abdul Rahman (2022), Abhigyan Kishor (2022), William Lugoloobi (2022), Mesha Patel (2021), Muhammad Uzair Umar (2021), Abiram Gangavaram (2021), Shankar Kumar (2020), Maria Macoridis (2020), Mohamed Ahmed Saqib (2020), Achira Battacharyya (2020), Benjamin Coles (2019), Hussein Aly (2019), Safin Hossain (2019), Adhithya Arun (2018, 2019), Abbas Ahmed (2018, 2019), Manan Gandhi (2018), Barath Kumar Thulasidoss (2018), Zainab Akhtar (2018), Sabarish Sainathan (2018), Nandhini Subramanian (2017), Meghana Yechuri (2017), Vedkumar Patel (2017), Maimoon Siddiqui (2017), Shaden Shaar (2016), Amer Ahmed (2016), Deeksha Singh (2016), Abdullah Khan (2016), Latifa Al Thani (*Qatari*, 2015), Maryam Al Naemi (*Qatari*, 2015), Jacob Sunny (2015), Olympia Datta (2015), Harsh Sharma (2015), Juan Sam (2015), Alaa Khader (2015), Ashwini Kamath (2015), Mohammad Yaqoob (2015), Dhruv Relwani (2015)

References

Available upon request.