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Education

PhD, Hong Kong University of Science & Technology, 2001

Master of Applied Science, Nanyang Technological University, Singapore, 1997

Bachelor of Applied Science, Nanyang Technological University, Singapore, 1994

Academic Appointments

Professor of Computer Science, School of Computing and Information Systems, SMU, Apr 2021 - Present

Professor of Information Systems, School of Computing and Information Systems, SMU, Jan 2021 - Mar 2021

Professor, City University of Hong Kong, China, Jul 2015 - Dec 2020

Associate Professor, City University of Hong Kong, China, Mar 2009 - Jun 2015

Assistant Professor, City University of Hong Kong, China, Jan 2002 - Feb 2009

Academic Administrative Positions

Director, Human-Machine Collaborative Systems Cluster, School of Computing and Information Systems, SMU, Jul 2021 - Present

Other Positions and Affiliations

Visiting Research Professor, NExT++ Research Center, National University of Singapore, Singapore, Dec 2018 - Nov 2020

Awards and Honors

Best Student Paper, Multimedia Modeling, 2017

President Award, City University of Hong Kong, 2017

Best Student Paper, ACM Multimedia, 2016

Best Poster, ACM Multimedia, 2014

Best Paper, International Conference on Internet Multimedia Computing and Service, 2013

Grant Challenge Award (2nd Prize) , ACM Multimedia , 2011

Professional Memberships

Senior Member, IEEE, 2017

Distinguished Scientist , ACM, 2016

RESEARCH

Research and Project Areas

Multimedia Search, Analysis and Mining; Video Analytics; Lifestyle and Wellness Intelligence; Computer Vision and Image Processing; Machine Learning

Publications

Journal Articles [Refereed]

Interactive search vs. automatic search: An extensive study on video retrieval, by NGUYEN, Phuong-Anh; NGO, Chong-Wah. (2021). *ACM Transactions on Multimedia Computing, Communications and Applications*, 17 (2), 1-24. (Published)

Mixed dish recognition with contextual relation and domain alignment, by DENG, Lixi; CHEN, Jingjing; NGO, Chong-Wah; SUN, Qianru; TANG, Sheng; ZHANG, Yongdong; CHUA, Tat-Seng. (2021). *IEEE Transactions on Multimedia*, 1-13. <https://doi.org/10.1109/TMM.2021.3075037> (Published)

Learning to match anchor-target video pairs with dual attentional holographic networks, by HAO, Yan Bin; NGO, Chong-Wah; ZHU, Bin. (2021). *IEEE Transactions on Image Processing*, 30 8130-8143. (Published)

A study of multi-task and region-wise deep learning for food ingredient recognition, by CHEN, Jingjing; ZHU, Bin; NGO, Chong-Wah; CHUA, Tat-Seng; JIANG, Yu-Gang. (2021). *IEEE Transactions on Image Processing*, 30 1514-1526. (Published)

Neighbourhood structure preserving cross-modal embedding for video hyperlinking, by HAO, Yanbin; NGO, Chong-Wah; HUET, Benoit. (2020). *IEEE Transactions on Multimedia*, 22 (1), 188-200. (Published)

A fine granularity object-level representation for event detection and recounting, by ZHANG, Hao; NGO, Chong-Wah. (2019). *IEEE Transactions on Multimedia*, 21 (6), 1450-1463. <https://doi.org/10.1109/TMM.2018.2884478> (Published)

Cross-modal recipe retrieval with stacked attention model, by CHEN, Jing-Jing; PANG, Lei; NGO, Chong-Wah. (2018). *Multimedia Tools and Applications*, 77 (22), 29457-29473. (Published)

k-means: A revisit, by ZHAO, Wan-Lei; DENG, Cheng-Hao; NGO, Chong-Wah. (2018). *Neurocomputing*, 291 195-206. (Published)

PageSense: Toward stylewise contextual advertising via visual analysis of web pages, by MEI, Tao; LI, Lusong; TIAN, Xinmei; TAO, Dacheng; NGO, Chong-Wah. (2018). *IEEE Transactions on Circuits and Systems for Video Technology*, 28 (1), 254-266. (Published)

Semantic reasoning in zero example video event retrieval, by DE BOER, M. H. T.; LU, Yi-Jie; ZHANG, Hao; SCHUTTE, Klamer; NGO, Chong-Wah; KRAAIJ, Wessel. (2017). *ACM Transactions on Multimedia Computing, Communications and Applications*, 13 (4), 1-18. (Published)

Blind late fusion in multimedia event retrieval, by DE BOER, Maaike H. T.; SCHUTTE, Klamer; ZHANG, Hao; LU, Yi-Jie; NGO, Chong-Wah; KRAAIJ, Wessel. (2016). *International Journal of Multimedia*

Information Retrieval, 5 (4), 203-217. (Published)

Hierarchical visualization of video search results for topic-based browsing, by JIANG, Yu-Gang; WANG, Jiajun; WANG, Qiang; LIU, Wei; NGO, Chong-Wah. (2016). *IEEE Transactions on Multimedia*, 18 (11), 2161-2170. (Published)

Fast covariant VLAD for image search, by ZHAO, Wan-Lei; NGO, Chong-Wah; WANG, Hanzi. (2016). *IEEE Transactions on Multimedia*, 18 (9), 1843-1854. (Published)

Hyperlink-aware object retrieval, by ZHANG, Wei; NGO, Chong-Wah; CAO, Xiaochun. (2016). *IEEE Transactions on Image Processing*, 25 (9), 4186-4198. (Published)

Automatic hookworm detection in wireless capsule endoscopy images, by WU, Xiao; CHEN, Honghan; GAN, Tao; CHEN, Junzhou; NGO, Chong-Wah; PENG, Qiang. (2016). *IEEE Transactions on Medical Imaging*, 35 (7), 1741-1752. (Published)

On the use of commonsense ontology for multimedia event recounting, by TAN, Chun-Chet; NGO, Chong-Wah. (2016). *International Journal of Multimedia Information Retrieval*, 5 (2), 73-88. (Published)

Detection of bird nests in overhead catenary system images for high-speed rail, by WU, Xiao; YUAN, Ping; PENG, Qiang; NGO, Chong-Wah; HE, Jun-Yan. (2016). *Pattern Recognition*, 51 242-254. (Published)

Opinion question answering by sentiment clip localization, by PANG, Lei; NGO, Chong-Wah. (2016). *ACM Transactions on Multimedia Computing, Communications and Applications*, 12 (2), 1-19. (Published)

Object pooling for multimedia event detection and evidence localization, by ZHANG, Ho; NGO, Chong-Wah. (2016). *IEEE Transactions on Media Technology and Applications*, 4 (3), 218-226. (Published)

Human action recognition in unconstrained videos by explicit motion modeling, by JIANG, Yu-Gang; DAI, Qi; LIU, Wei; XUE, Xiangyang; NGO, Chong-Wah. (2015). *IEEE Transactions on Image Processing*, 24 (11), 3781-3795. (Published)

Deep multimodal learning for affective analysis and retrieval, by PANG, Lei; ZHU, Shiai; NGO, Chong-Wah. (2015). *IEEE Transactions on Multimedia*, 17 (11), 2008-2020. (Published)

Topological spatial verification for instance search, by ZHANG, Wei; NGO, Chong-Wah. (2015). *IEEE Transactions on Multimedia*, 17 (8), 1236-1247. (Published)

Unsupervised celebrity face naming in web videos, by PANG, Lei; NGO, Chong-Wah. (2015). *IEEE Transactions on Multimedia*, 17 (6), 854-866. (Published)

Click-boosting multi-modality graph-based reranking for image search, by YANG, Xiaopeng; ZHANG, Yongdong; YAO, Ting; NGO, Chong-Wah; MEI, Tao. (2015). *Multimedia Systems*, 21 (2), 217-227. (Published)

Name-face association in web videos: A large-scale dataset, baselines, and open issues, by CHEN, Zhi-Neng; NGO, Chong-Wah; ZHANG, Wei; CAO, Juan; JIANG, Yu-Gang. (2014). *Journal of Computer Science and Technology*, 29 (5), 785-798. (Published)

Video event detection using motion relativity and feature selection, by WANG, Feng; SUN, Zhanhu; JIANG, Yu-Gang; NGO, Chong-Wah. (2014). *IEEE Transactions on Multimedia*, 16 (5), 1303-1315. (Published)

Collaborative error reduction for hierarchical classification, by ZHU, Shiai; WEI, Xiao-Yong; NGO, Chong-Wah. (2014). *Computer Vision and Image Understanding*, 124 79-90. (Published)

Placing videos on a semantic hierarchy for search result navigation, by TAN, Song; JIANG, Yu-Gang; NGO, Chong-Wah. (2014). *ACM Transactions on Multimedia Computing, Communications and Applications*, 10 (4), 1-120. (Published)

A hamming embedding kernel with informative bag-of-visual words for video semantic indexing, by WANG, Feng; ZHAO, Wen-Lei; NGO, Chong-Wah; Merialdo, Bernard. (2014). *ACM Transactions on Multimedia Computing, Communications and Applications*, 10 (3), 1-20. (Published)

Visual typo correction by collocative optimization: A case study on merchandize images, by WEI, Xiao-Yong; YANG, Zhen-Qun; NGO, Chong-Wah; ZHANG, Wei. (2014). *IEEE Transactions on Image Processing*, 23 (2), 527-540. (Published)

Multimedia modeling, by NGO, Chong-Wah; SCHOEFFMANN, Klaus; ANDREOPOULOS, Yiannis;

- BREITENEDER, Christian. (2013). *Multimedia Tools and Applications*, 71 (1), 331-332. (Published)
- Near-duplicate video retrieval: Current research and future trends, by LIU, Jiajun; HUANG, Zi; CAI, Hongyun; SHEN, Heng Tao; NGO, Chong-Wah; WANG, Wei. (2013). *ACM Computing Surveys*, 45 (4), 1-23. (Published)
- Circular reranking for visual search, by YAO, Ting; NGO, Chong-Wah. (2013). *IEEE Transactions on Image Processing*, 22 (4), 1642-1653. (Published)
- Flip-invariant SIFT for copy and object detection, by ZHAO, Wan-Lei; NGO, Chong-Wah. (2013). *IEEE Transactions on Image Processing*, 22 (3), 980-991. (Published)
- Guest editorial: selected papers from ICIMCS 2011, by NGO, Chong-Wah; XU, Changsheng; WU, Xiao; EL SADDIK, Abdulmotaleb. (2013). *Multimedia Systems*, 19 (1), 1-2. (Published)
- Sampling and ontologically pooling web images for visual concept learning, by ZHU, Shiai; NGO, Chong-Wah; JIANG, Yu-Gang. (2012). *IEEE Transactions on Multimedia*, 14 (4), 1068-1078. (Published)
- Fast semantic diffusion for large-scale context-based image and video annotation, by JIANG, Yu-Gang; DAI, Qi; WANG, Jun; NGO, Chong-Wah. (2012). *IEEE Transactions on Image Processing*, 21 (6), 3080-3091. (Published)
- Boosting web video categorization with contextual information from social web, by WU, Xiao; NGO, Chong-Wah; ZHU, Yi-Ming; PENG, Qiang. (2012). *World Wide Web*, 15 (2), 197-212. (Published)
- Summarizing rushes videos by motion, object, and event understanding, by WANG, Feng; NGO, Chong-Wah. (2012). *IEEE Transactions on Multimedia*, 14 (1), 1-12. (Published)
- Tracking web video topics: Discovery, visualization, and monitoring, by CAO, Juan; NGO, Chong-Wah; ZHANG, Yong-Dong; LI, Jin-Tao. (2011). *IEEE Transactions on Circuits and Systems for Video Technology*, 21 (12), 1835-1846. (Published)
- Beyond search: Event-driven summarization for web videos, by HONG, Richard; TANG, Jinhui; TAN, Hung-Khoon; NGO, Chong-Wah; YAN, Shuicheng; CHUA, Tat-Seng. (2011). *ACM Transactions on Multimedia Computing, Communications and Applications*, 7 (4), 1-21. (Published)
- Concept-driven multi-modality fusion for video search, by WEI, Xiao-Yong; JIANG, Yu-Gang; NGO, Chong-Wah. (2011). *IEEE Transactions on Circuits and Systems for Video Technology*, 21 (1), 62-73. (Published)
- Efficient mining of multiple partial near-duplicate alignments by temporal network, by TAN, Hung-Khoon; NGO, Chong-Wah; CHUA, Tat-Seng. (2010). *IEEE Transactions on Circuits and Systems for Video Technology*, 20 (11), 1486-1498. (Published)
- On the annotation of web videos by efficient near-duplicate search, by ZHAO, Wan-Lei; WU, Xiao; NGO, Chong-Wah. (2010). *IEEE Transactions on Multimedia*, 12 (5), 448-461. (Published)
- Representations of keypoint-based semantic concept detection: A comprehensive study, by JIANG, Yu-Gang; YANG, Jun; NGO, Chong-Wah. (2010). *IEEE Transactions on Multimedia*, 12 (1), 42-53. (Published)
- Localized matching using Earth Mover's Distance towards discovery of common patterns from small image samples, by TAN, Hung-Khoon; NGO, Chong-Wah. (2009). *Image and Vision Computing*, 27 (10), 1470-1483. <https://doi.org/10.1016/j.imavis.2009.01.002> (Published)
- Visual word proximity and linguistics for semantic video indexing and near-duplicate retrieval, by JIANG, Yu-Gang; NGO, Chong-Wah. (2009). *Computer Vision and Image Understanding*, 113 (3), 405-414. (Published)
- Real-time near-duplicate elimination for web video search with content and context, by WU, Xiao; NGO, Chong-Wah; HAUPTMANN, Alexander G.. (2009). *IEEE Transactions on Multimedia*, 11 (2), 196-207. (Published)
- Scale-rotation invariant pattern entropy for keypoint-based near-duplicate detection, by ZHAO, Wan-Lei; NGO, Chong-Wah. (2009). *IEEE Transactions on Image Processing*, 18 (2), 412-423. (Published)
- Structuring low-quality videotaped lectures for cross-reference browsing by video text analysis, by WANG,

Feng; NGO, Chong-Wah; PONG, Ting-Chuen. (2008). *Pattern Recognition*, 41 (10), 3257-3269. (Published)

Selection of concept detectors for video search by ontology-enriched semantic spaces, by WEI, Xiao-Yong; NGO, Chong-Wah; JIANG, Yu-Gang. (2008). *IEEE Transactions on Multimedia*, 10 (6), 1085-1096. (Published)

Simulating a smartboard by real-time gesture detection in lecture videos, by WANG, Feng; NGO, Chong-Wah; PONG, Ting-Chuen. (2008). *IEEE Transactions on Multimedia*, 10 (5), 926-935. (Published)

Measuring novelty and redundancy with multiple modalities in cross-lingual broadcast news, by WU, Xiao; HAUPTMANN, Alexander G.; NGO, Chong-Wah. (2008). *Computer Vision and Image Understanding*, 110 (3), 418-431. (Published)

Multimodal news story clustering with pairwise visual near-duplicate constraint, by WU, Xiao; NGO, Chong-Wah; HAUPTMANN, Alexander G.. (2008). *IEEE Transactions on Multimedia*, 10 (2), 188-199. (Published)

OM-based video shot retrieval by one-to-one matching, by PENG, Yuxin; NGO, Chong-Wah; XIAO, Jianguo. (2007). *Multimedia Tools and Applications*, 34 (2), 249-266. (Published)

Near-duplicate keyframe identification with interest point matching and pattern learning, by ZHAO, Wan-Lei; NGO, Chong-Wah; TAN, Hung-Khoon; WU, Xiao. (2007). *IEEE Transactions on Multimedia*, 9 (5), 1037-1048. (Published)

Lecture video enhancement and editing by integrating posture, gesture, and text, by WANG, Feng; NGO, Chong-Wah; PONG, Ting-Chuen. (2007). *IEEE Transactions on Multimedia*, 9 (2), 397-409. (Published)

Moving-object detection, association, and selection in home videos, by PAN, Zailiang; NGO, Chong-Wah. (2007). *IEEE Transactions on Multimedia*, 9 (2), 268-279. (Published)

Introduction: special issue for the selected papers in the fourth international conference on Intelligent Multimedia Computing and Networking (IMMCN) 2005, by NGO, Chong-Wah; LEONG, Hong-Va. (2007). *Multimedia Tools and Applications*, 34 (2), 137-138. (Published)

Clip-based similarity measure for query-dependent clip retrieval and video summarization, by PENG, Yuxin; NGO, Chong-Wah. (2006). *IEEE Transactions on Circuits and Systems for Video Technology*, 16 (5), 612-627. (Published)

Gestalt-based feature similarity measure in trademark database, by JIANG, Hui; NGO, Chong-Wah; TAN, Hung-Khoon. (2006). *Pattern Recognition*, 39 (5), 988-1001. (Published)

Selective object stabilization for home video consumers, by PAN, Zailiang; NGO, Chong-Wah. (2005). *IEEE Transactions on Consumer Electronics*, 51 (4), 1074-1084. (Published)

Video text detection and segmentation for optical character recognition, by NGO, Chong-Wah; CHAN, Chi-Kwong. (2005). *Multimedia Systems*, 10 (3), 261-272. (Published)

Video summarization and scene detection by graph modeling, by NGO, Chong-Wah; MA, Yu-Fei; ZHANG, Hong-Jiang. (2005). *IEEE Transactions on Circuits and Systems for Video Technology*, 15 (2), 296-305. (Published)

Approach for video retrieval by video clip, by PENG, Y.; PENG, Y.; NGO, C.W.; GUO, Z.; XIAO, J.. (2003). *Ruanjian Xuebao / Journal of Software*, 14 (8), 1409-1417. (Published)

Motion analysis and segmentation through spatio-temporal slices processing, by NGO, Chong-Wah; PONG, Ting-Chuen; ZHANG, Hong-Jiang. (2003). *IEEE Transactions on Image Processing*, 12 (3), 341-355. (Published)

On clustering and retrieval of video shots through temporal slices analysis, by NGO, Chong-Wah; PONG, Ting-Chuen; ZHANG, Hong-Jiang. (2002). *IEEE Transactions on Multimedia*, 4 (4), 446-458. (Published)

Motion-based video representation for scene change detection, by NGO, Chong-Wah; PONG, Ting-Chuen; ZHANG, Hong-Jiang. (2002). *International Journal of Computer Vision*, 50 (2), 127-142. (Published)

Exploiting image indexing techniques in DCT domain, by NGO, Chong-Wah; PONG, Ting-Chuen; CHIN, Ronald T.. (2001). *Pattern Recognition*, 34 (9), 1841-1851. (Published)

Video partitioning by temporal slice coherency, by NGO, Chong-Wah; PONG, Ting-Chuen; CHIN, Roland T.. (2001). *IEEE Transactions on Circuits and Systems for Video Technology*, 11 (8), 941-953. (Published)

Recent advances in content-based video analysis, by NGO, Chong-Wah; PONG, Ting-Chuen; ZHANG, Hong-Jiang. (2001). *International Journal of Image and Graphics*, 1 (3), 445-468. (Published)

Motion tracking of human mouth by generalized deformable models, by CHAN, Syin; NGO, Chong-Wah; LAI, Kok F.. (1999). *Pattern Recognition Letters*, 20 (9), 879-887. (Published)

Journal Articles [Non-Refereed]

Web-scale near-duplicate search: Techniques and applications, by NGO, Chong-Wah; XU, Changsheng; KRAAIJ, Wessel; EL SADDIK, Abdulmotaleb. (2013). *IEEE MultiMedia*, 20 (3), 10-12. (Published)

Mining event structures from web videos, by WU, Xiao; LU, Yi-Jie; PENG, Qiang; NGO, Chong-Wah. (2011). *IEEE MultiMedia*, 18 (1), 38-51. (Published)

Data-driven approaches to community-contributed video applications, by WU, Xiao; NGO, Chong-Wah; ZHAO, Wan-Lei. (2010). *IEEE MultiMedia*, 17 (4), 58-68. (Published)

Threading and autodocumenting news videos: A promising solution to rapidly browse news topics, by WU, Xiao; NGO, Chong-Wah; LI, Qing. (2006). *IEEE Signal Processing Magazine*, 23 (2), 59-68. (Published)

Approach for shot retrieval by optimal matching in the bipartite graph, by PENG, Yu-Xin; NGO, Chong-Wah; XIAO, Jian-Guo. (2004). *Tien Tzu Hsueh Pao/Acta Electronica Sinica*, 32 (7), 1135-1139. (Published)

Key technologies for content-based video retrieval, by PENG, Y.; PENG, Y.; NGO, C.W.; GUO, Z.; XIAO, J.. (2004). *Jisuanji Gongcheng/Computer Engineering*, 30 (1), 14-. (Published)

Editorials

Intelligent analytics for big video data, by LIU, Wu; MA, Huadong; NGO, Chong-Wah. (2020). *Multimedia Tools and Applications*, 79 (7-8), 4637-4637. (Published)

Books (Non-Refereed)

SQL-like interpretable interactive video search by WU, Jiabin; NGUYEN, Phuong Anh; MA, Zhixin; NGO, Chong-Wah. (2021). International Conference on MultiMedia Modeling, Prague: Springer Science and Business Media Deutschland GmbH. (Published)

Edited Books

Special issue on multimedia recommendation and multi-modal data analysis, edited by HE, Xiangnan; LIU, Zhenguang; ZHANG, Hanwang; NGO, Chong-Wah; KARAMAN, Svebor; ZHANG, Yongfeng. (2019). New York: SpringerLink. (Published)

Conference Proceedings

K-sums clustering: A stochastic optimization approach, by ZHAO Wan-Lei; LAN, Shi Ying; CHEN, Run-Qing; NGO, Chong-Wah. (2021). *Proceedings of the 30th ACM International Conference on Information & Knowledge Management*, (pp. 2679-2687) New York : Association for Computing Machinery. https://api.elsevier.com/content/abstract/scopus_id/85119187998 (Published)

Token shift transformer for video classification, by ZHANG Hao; HAO, Yanbin.; NGO, Chong-Wah . (2021). *Proceedings of the 29th ACM International Conference on Multimedia, October 20-24*, (pp. 917-925) New York : Association for Computing Machinery, Inc. (Published)

CONQUER: Contextual query-aware ranking for video corpus moment retrieval, by HOU, Zhijian; NGO, Chong-Wah; CHAN, W. K.. (2021). *Proceedings of the 29th ACM International Conference on Multimedia, MM 2021, Virtual Conference, 2021 October 20-24*, (pp. 3900-3908) Virtual Conference: Association for Computing Machinery, Inc. (Published)

AlxFood'21: 3rd workshop on AlxFood, by GUERRERO, Ricardo; SPRANGER, Michael; JIANG, Shuqiang; NGO, Chong-Wah. (2021). *Proceedings of the 29th ACM International Conference on Multimedia, MM 2021, Virtual Conference, October 20-24*, (pp. 5688-5689) Virtual Conference: Association for Computing Machinery, Inc. (Published)

Condensing a sequence to one informative frame for video recognition, by QIU, Zhaofan; YAO, Ting; SHU, Yan; NGO, Chong-Wah; MEI, Tao . (2021). *Proceedings of the IEEE/CVF International Conference on Computer Vision, Virtual Online, October 11-17*, (pp. 16311-16320) New York : IEEE . (Published)

Optimization planning for 3D ConvNets, by QIU, Zhaofan; YAO, Ting; NGO, Chong-Wah; MEI, Tao. (2021). *Proceedings of the 38th International Conference on Machine Learning, Virtual Conference, 2021 July 18-24*, (pp. 8726-8736) Virtual Conference: PMLR . (Published)

Boosting video representation learning with multi-faceted integration, by QIU, Zhaofan; TING, Yao; NGO, Chong-Wah; ZHANG, Xiao-Ping; WU, Dong; MEI, Tao . (2021). *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition, June 20-25*, New York : IEEE . (Published)

Terrace-based food counting and segmentation, by NGUYEN, Huu-Thanh; NGO, Chong-Wah. (2021). *Proceedings of the 35th AAAI Conference on Artificial Intelligence, Virtual Conference, 2021 February 2-9*, (pp. 2364-2372) USA: AAAI. (Published)

Cross-domain cross-modal food transfer, by ZHU, Bin; NGO, Chong-Wah ; CHEN, Jingjing. (2020). *Proceedings of the 28th ACM International Conference on Multimedia, MM 2020, Seattle, October 12 16*, (pp. 3762-3770) Virtual Conference: Association for Computing Machinery, Inc. (Published)

Compact bilinear augmented query structured attention for sport highlights classification, by HAO, Yanbin; ZHANG, Hao; NGO, Chong-Wah; LIU, Qing; HU, Xiaojun. (2020). *Proceedings of the 28th ACM International Conference on Multimedia, MM 2020, Seattle, October 12 16*, (pp. 628-636) Virtual Conference: Association for Computing Machinery, Inc. (Published)

Interpretable embedding for ad-hoc video search, by WU, Jiaxin; NGO, Chong-Wah. (2020). *Proceedings of the 28th ACM International Conference on Multimedia, MM 2020, Seattle, October 12 16*, (pp. 3357-3366) Virtual Conference: Association for Computing Machinery, Inc. (Published)

Person-level action recognition in complex events via TSD-TSM networks, by HAO, Yanbin; LIU, Zi-Niu; ZHANG, Hao; ZHU, Bin; CHEN, Jingjing; JIANG, Yu-Gang; NGO, Chong-Wah. (2020). *Proceedings of the 28th ACM International Conference on Multimedia, MM 2020, Seattle, October 12 16*, (pp. 4699-4702) Virtual Conference: Association for Computing Machinery, Inc. (Published)

Multi-modal cooking workflow construction for food recipes, by PAN, Liangming; CHEN, Jingjing; WU, Jianlong; LIU, Shaoteng; NGO, Chong-Wah; KAN, Min-Yen; JIANG, Yugang; CHUA, Tat-Seng. (2020). *Proceedings of the 28th ACM International Conference on Multimedia, MM 2020, Seattle, October 12 16*, (pp. 1132-1141) Virtual Conference: Association for Computing Machinery, Inc. (Published)

Transferring and regularizing prediction for semantic segmentation, by ZHANG, Yiheng; QIU, Zhaofan; YAO, Ting; NGO, Chong-Wah; LIU, Dong; MEI, Tao. (2020). *Proceedings of 2020 IEEE/CVF Conference on Computer Vision and Pattern Recognition, CVPR 2020, Seattle, June 13-19*, (pp. 9618-9627) Virtual Conference: IEEE Computer Society. (Published)

Cookgan: Causality based text-to-image synthesis, by ZHU, Bin; NGO, Chong-Wah. (2020). *Proceedings of 2020 IEEE/CVF Conference on Computer Vision and Pattern Recognition, CVPR 2020, Seattle, June 13-19*, (pp. 5518-5526) Virtual Conference: IEEE Computer Society. (Published)

Hyperbolic visual embedding learning for zero-shot recognition, by LIU, Shaoteng; CHEN, Jingjing; PAN, Liangming; NGO, Chong-Wah; CHUA, Tat-Seng; JIANG, Yu-Gang. (2020). *Proceedings of 2020 IEEE/CVF Conference on Computer Vision and Pattern Recognition, CVPR 2020, Seattle, June 13-19*, (pp. 9270-9278) Virtual Conference: IEEE Computer Society. (Published)

Exploring category-agnostic clusters for open-set domain adaptation, by PAN, Yingwei; YAO, Ting; LI, Yehao; NGO, Chong-Wah; MEI, Tao. (2020). *Proceedings of 2020 IEEE/CVF Conference on Computer Vision and Pattern Recognition, CVPR 2020, Seattle, June 13-19*, (pp. 13864-13872) Virtual Conference: IEEE Computer Society. (Published)

Zero-shot ingredient recognition by multi-relational graph convolutional network, by CHEN, Jingjing; PAN, Liangming; WEI, Zhipeng; WANG, Xiang; NGO, Chong-Wah; CHUA, Tat-Seng. (2020). *Proceedings of the 34th AAAI Conference on Artificial Intelligence, AAAI 2020, New York, February 7 12*, (pp. 10542-10550)

New York: AAAI press. (Published)

VIREO @ Video Browser Showdown 2020, by NGUYEN, Phuong Anh; WU, Jiaxin; NGO, Chong-Wah; FRANCIS, Danny; HUET, Benoit. (2020). *MultiMedia Modeling: 26th International Conference, MMM 2020, Daejeon, January 5-8: Proceedings*, (pp. 772-777) Cham: Springer.
https://doi.org/10.1007/978-3-030-37734-2_68 (Published)

Vireo-EuReCOM @ TRECVID 2019: Ad-hoc video search (AVS), by NGUYEN, Phuong Anh; WU, Jiaxin; NGO, Chong-Wah; DANNY, Francis; HUET, Benoit. (2019). *Proceedings of 2019 TREC Video Retrieval Evaluation, TRECVID 2019, Gaithersburg, MD, USA, November 12-13*, (pp. 1-6) Gaithersburg: National Institute of Standards and Technology (NIST). (Published)

Fusion of multimodal embeddings for ad-hoc video search, by FRANCIS, Danny; NGUYEN, Phuong Anh; HUET, Benoit; NGO, Chong-Wah. (2019). *Proceedings of the 2019 IEEE/CVF International Conference on Computer Vision Workshop (ICCVW), Seoul, Korea, October 27-28*, (pp. 1868-1872) Seoul: Institute of Electrical and Electronics Engineers Inc. (Published)

Exploring object relation in mean teacher for cross-domain detection, by CAI, Qi; PAN, Yingwei; NGO, Chong-Wah; TIAN, Xinmei; DUAN, Lingyu; YAO, Ting. (2019). *Proceedings of the 32nd IEEE/CVF Conference on Computer Vision and Pattern Recognition, CVPR 2019, Long Beach, California, June 16-21*, (pp. 11449-11458) Long Beach: IEEE Computer Society. (Published)

R2GAN: Cross-modal recipe retrieval with generative adversarial network, by ZHU, Bin; NGO, Chong-Wah; CHEN, Jingjing; HAO, Yanbin. (2019). *Proceedings of the 32nd IEEE/CVF Conference on Computer Vision and Pattern Recognition, CVPR 2019, Long Beach, California, June 16-21*, (pp. 11469-11478) Long Beach: IEEE Computer Society. (Published)

Transferrable prototypical networks for unsupervised domain adaptation, by PAN, Yingwei; YAO, Ting; LI, Yehao; WANG, Yu; NGO, Chong-Wah; MEI, Tao. (2019). *Proceedings of the 32nd IEEE/CVF Conference on Computer Vision and Pattern Recognition, CVPR 2019, Long Beach, California, June 16-21*, (pp. 2234-2242) Long Beach: IEEE Computer Society. (Published)

Learning spatio-temporal representation with local and global diffusion, by QIU, Zhaofan; YAO, Ting; NGO, Chong-Wah; TIAN, Xinmei; MEI, Tao. (2019). *Proceedings of the 32nd IEEE/CVF Conference on Computer Vision and Pattern Recognition, CVPR 2019, Long Beach, California, June 16-21*, (pp. 12048-12057) Long Beach: IEEE Computer Society. (Published)

DietLens-eout: Large scale restaurant food photo recognition, by WEI, Zhipeng; CHEN, Jingjing; MING, Zhaoyan; NGO, Chong-Wah; CHUA, Tat-Seng; ZHOU, Fengfeng. (2019). *Proceedings of the 2019 on International Conference on Multimedia Retrieval, ICMR 2019, Ottawa, Canada, June 10-13*, (pp. 399-403) Ottawa: ACM. (Published)

Mixed dish recognition through multi-label learning, by WANG, Yunan; CHEN, Jingjing; NGO, Chong-Wah; CHUA, Tat-Seng; ZUO, Wanli; MING, Zhaoyan. (2019). *Proceedings of the 11th Workshop on Multimedia for Cooking and Eating Activities, Ottawa, Canada, 2019 June 10*, (pp. 1-8) Ottawa: ACM. (Published)

Vireo @ video browser showdown 2019, by NGUYEN, Phuong Anh; NGO, Chong-Wah; FRANCIS, Danny; HUET, Benoit. (2019). *Proceedings of the 25th International Conference, MMM 2019, Thessaloniki, Greece, January 8-11*, (pp. 609-615) Thessaloniki: SpringerLink. (Published)

Interpretable multimodal retrieval for fashion products, by LIAO, Lizi; HE, Xiangnan; ZHAO, Bo; NGO, Chong-Wah; CHUA, Tat-Seng. (2018). *Proceedings of the 26th ACM international conference on Multimedia, Seoul, 2018 October 22-26*, (pp. 1571-1579) Seoul: Association for Computing Machinery, Inc. (Published)

Deep understanding of cooking procedure for cross-modal recipe retrieval, by CHEN, Jingjing; NGO, Chong-Wah; FENG, Fu-Li; CHUA, Tat-Seng. (2018). *Proceedings of the 26th ACM international conference on Multimedia, Seoul, 2018 October 22-26*, (pp. 1020-1028) Seoul: Association for Computing Machinery, Inc. (Published)

Enhanced vireo KIS at VBS 2018, by NGUYEN, Phuong Anh; LU, Yi-Jie; ZHANG, Hao; NGO, Chong-Wah. (2018). *Proceedings of 24th International Conference, MMM 2018, Bangkok, Thailand, February 5-7*, (pp. 407-412) Bangkok: SpringerLink. (Published)

Food photo recognition for dietary tracking: System and experiment, by MING, Zhao-Yan; CHEN, Jingjing; CAO, Yu; FORDE, Ciarn; NGO, Chong-Wah; CHUA, Tat Seng. (2018). *Proceedings of the 24th*

International Conference, MMM 2018, Bangkok, Thailand, February 5-7, (pp. 129-141) Bangkok: SpringerLink. (Published)

Cross-modal recipe retrieval with rich food attributes, by CHEN, Jingjing; NGO, Chong-Wah; CHUA, Tat-Seng. (2017). *Proceedings of the 25th ACM International Conference on Multimedia, MM 2017, Mountain View, California, October 23-27*, (pp. 1771-1779) Mountain View: Association for Computing Machinery, Inc. (Published)

PIC2DISH: A customized cooking assistant system, by AN, Yongsheng; CAO, Yu; CHEN, Jingjing; NGO, Chong-Wah; JIA, Jia; LUAN, Huanbo; CHUA, Tat-Seng. (2017). *Proceedings of the 25th ACM International Conference on Multimedia, MM 2017, Mountain View, California, October 23-27*, (pp. 1269-1273) Mountain View: Association for Computing Machinery, Inc. (Published)

On the selection of anchors and targets for video hyperlinking, by CHENG, Zhi-Qi; ZHANG, Hao; WU, Xiao; NGO, Chong-Wah. (2017). *Proceedings of the 17th ACM International Conference on Multimedia Retrieval, ICMR 2017*, (pp. 287-293) Bucharest: Association for Computing Machinery, Inc. (Published)

Cross-modal recipe retrieval: How to cook this dish?, by CHEN, Jingjing; PANG, Lei; NGO, Chong-Wah. (2017). *Proceedings of the 23rd International Conference, MMM 2017, Reykjavik, Iceland, January 4-6*, (pp. 588-600) Reykjavik: SpringerLink. (Published)

Concept-based interactive search system, by LU, Yi-Jie; NGUYEN, Phuong Anh; ZHANG, Hao; NGO, Chong-Wah. (2017). *Proceedings of the 23rd International Conference, MMM 2017, Reykjavik, Iceland, January 4-6*, (pp. 463-468) Reykjavik, Iceland: SpringerLink. (Published)

Color-sketch simulator: A guide for color-based visual known-item search, by LOKO, Jakub; PHUONG, Anh Nguyen; VOMLELOV, Marta; NGO, Chong-Wah. (2017). *Proceedings of the 13th International Conference, ADMA 2017, Singapore, November 5-6*, (pp. 754-763) Singapore: SpringerLink. (Published)

VIREO @ TRECVID 2016: Multimedia event detection, ad-hoc video search, video-to-text description, by ZHANG, Hao; LU, Yi-Jie; NGO, Chong-Wah. (2016). *Proceedings of TRECVID 2016: Gaithersburg, November 14-16*, (pp. 1-15) Gaithersburg: National Institute of Standards and Technology. <https://www-nlpir.nist.gov/projects/tvpubs/tv16.papers/vireo.pdf> (Published)

Deep-based ingredient recognition for cooking recipe retrieval, by CHEN, Jingjing; NGO, Chong-Wah. (2016). *Proceedings of the 24th ACM International conference on Multimedia, MM 2016, Amsterdam, October 15-19*, (pp. 32-41) Amsterdam: ACM. (Published)

Event detection with zero example: Select the right and suppress the wrong concepts, by LU, Yi-Jie; ZHANG, Hao; DE BOER, Maaïke; NGO, Chong-Wah. (2016). *Proceedings of the 6th ACM International Conference on Multimedia Retrieval, ICMR 2016, New York, June 6-9*, (pp. 127-134) New York: ACM. (Published)

Serendipity-driven celebrity video hyperlinking, by YANG, Shujun; PANG, Lei; NGO, Chong-Wah; HUET, Benoit. (2016). *Proceedings of the 2016 ACM International Conference on Multimedia Retrieval, New York, USA, June 6-9*, (pp. 413-416) New York: Association for Computing Machinery, Inc. (Published)

Learning query and image similarities with ranking canonical correlation analysis, by YAO, Ting; MEI, Tao; NGO, Chong-Wah. (2015). *Proceedings of the 15th IEEE International Conference on Computer Vision, ICCV 2015, Santiago, Chile, December 7-13*, (pp. 28-36) Santiago, Chile: Institute of Electrical and Electronics Engineers Inc. (Published)

Semi-supervised hashing with semantic confidence for large scale visual search, by PAN, Yingwei; YAO, Ting; LI, Houqiang; NGO, Chong-Wah; MEI, Tao. (2015). *Proceedings of the 38th International ACM SIGIR Conference on Research and Development in Information Retrieval, Santiago, Chile, 2015 August 9-13*, (pp. 53-62) Santiago, Chile: ACM. (Published)

Multimodal learning with deep Boltzmann Machine for emotion prediction in user generated videos, by PANG, Lei; NGO, Chong-Wah. (2015). *Proceedings of the 5th ACM International Conference on Multimedia Retrieval, ICMR 2015, Shanghai, China, June 23-26*, (pp. 619-622) Shanghai: ACM. (Published)

Improving automatic name-face association using celebrity images on the Web, by CHEN, Zhineng; FENG, Bailan; NGO, Chong-Wah; JIA, Caiyan; HUANG, Xiangsheng. (2015). *Proceedings of the 5th ACM International Conference on Multimedia Retrieval, ICMR 2015, Shanghai, China, June 23-26*, (pp. 623-626) Shanghai: ACM. (Published)

- Semi-supervised domain adaptation with subspace learning for visual recognition, by YAO, Ting; PAN, Yingwei; NGO, Chong-Wah; LI, Houqiang; MEI, Tao. (2015). *Proceedings of the 28th IEEE Conference on Computer Vision and Pattern Recognition: CVPR 2015, Boston, June 7-12*, (pp. 2142-2150) Boston: IEEE. (Published)
- Click-through-based subspace learning for image search, by PAN, Yingwei; YAO, Ting; TIAN, Xinmei; LI, Houqiang; NGO, Chong-Wah. (2014). *Proceedings of the 22nd ACM international conference on Multimedia, MM 2014, Orlando, Florida, November 3-7*, (pp. 233-236) Orlando: ACM. (Published)
- Scalable visual instance mining with threads of features, by ZHANG, Wei; LI, Hongzhi; NGO, Chong-Wah; CHANG, Shih-Fu. (2014). *Proceedings of the 22nd ACM international conference on Multimedia, MM 2014, Orlando, Florida, November 3-7*, (pp. 297-306) Orlando: ACM. (Published)
- Organizing video search results to adapted semantic hierarchies for topic-based browsing, by WANG, Jiajun; JIANG, Yu-Gang; WANG, Qiang; YANG, Kuiyuan; NGO, Chong-Wah. (2014). *Proceedings of the 22nd ACM international conference on Multimedia, MM 2014, Orlando, Florida, November 3-7*, (pp. 845-848) Orlando: ACM. (Published)
- CeleLabel: An interactive system for annotating celebrities in web videos, by CHEN, Zhineng; BAI, Jinfeng; NGO, Chong-Wah; FENG, Bailan; XU, Bo. (2014). *Proceedings of the 22nd ACM international conference on Multimedia, MM14, Orlando, Florida, November 3-7*, (pp. 759-760) Orlando: ACM. (Published)
- Click-through-based cross-view learning for image search, by PAN, Yingwei; YAO, Ting; MEI, Tao; LI, Houqiang; NGO, Chong-Wah; RUI, Yong. (2014). *Proceedings of the 37th International ACM SIGIR Conference on Research and Development in Information Retrieval, SIGIR 2014, Gold Coast, Australia, July 6-11*, (pp. 717-726) Gold Coast, Australia: ACM. (Published)
- CeleBrowser: An example of browsing big data on small device, by TAN, Song; NGO, Chong-Wah; XU, Jun; RUI, Yong. (2014). *Proceedings of the 4th ACM International Conference on Multimedia Retrieval, ICMR 2014, Glasgow, United Kingdom, April 1-4*, (pp. 514-517) Glasgow: ACM. (Published)
- Error recovered hierarchical classification, by ZHU, Shiai; WEI, Xiao-Yong; NGO, Chong-Wah. (2013). *MM '13: Proceedings of the 21st ACM International Conference on Multimedia: October 21-25, Barcelona, Spain*, (pp. 697-700) Barcelona, Spain: ACM. (Published)
- Image search by graph-based label propagation with image representation from DNN, by PAN, Yingwei; TING, Yao; YANG, Kuiyuan; LI, Houqiang; NGO, Chong-Wah; WANG, Jingdong; MEI, Tao. (2013). *MM '13: Proceedings of the 21st ACM International Conference on Multimedia: October 21-25, Barcelona, Spain*, (pp. 397-400) Barcelona, Spain: ACM. (Published)
- Annotation for free: Video tagging by mining user search behavior, by TING, Yao; MEI, Tao; NGO, Chong-Wah; LI, Shipeng. (2013). *MM '13: Proceedings of the 21st ACM International Conference on Multimedia: October 21-25, Barcelona, Spain*, (pp. 977-986) Barcelona, Spain: ACM. (Published)
- Click-boosting random walk for image search reranking, by YANG, Xiaopeng; ZHANG, Yongdong; YAO, Ting; ZHA, Zheng-Jun; NGO, Chong-Wah. (2013). *Proceedings of the 5th International Conference on Internet Multimedia Computing and Service, ICIMCS 2013, Huangshan, Anhui, China, August 17-19*, (pp. 1-6) Huangshan, Anhui, China: ACM. (Published)
- Video concept detection by learning from web images: A case study on cross domain learning, by ZHU, Shiai; YAO, Ting; NGO, Chong-Wah. (2013). *Proceedings of the 2013 IEEE International Conference on Multimedia and Expo Workshops, ICMEW 2013, San Jose, CA, July 15-19*, (pp. 1-6) San Jose, CA: IEEE. (Published)
- Unified entity search in social media community, by YAO, Ting; LIU, Yuan; NGO, Chong-Wah; MEI, Tao. (2013). *Proceedings of the 22nd International Conference on World Wide Web, Rio de Janeiro, Brazil, 2013 May13-17*, (pp. 1457-1466) Rio de Janeiro, Brazil: ACM. (Published)
- Searching visual instances with topology checking and context modeling, by ZHANG, Wei; NGO, Chong-Wah. (2013). *Proceedings of the 3rd ACM International Conference on Multimedia Retrieval, ICMR 2013, Dallas, Texas, April 16-20*, (pp. 57-64) Dallas, Texas: ACM. (Published)
- Snap-and-ask: Answering multimodal question by naming visual instance, by ZHANG, Wei; PANG, Lei; NGO, Chong-Wah. (2012). *Proceedings of the 20th ACM international conference on Multimedia, MM 2012, Nara, Japan, October 29 - November 2*, (pp. 609-618) Nara, Japan: ACM. (Published)

Video hyperlinking: Libraries and tools for threading and visualizing large video collection, by PANG, Lei; ZHANG, Wei; TAN, Hung-Khoon; NGO, Chong-Wah. (2012). *Proceedings of the 20th ACM international conference on Multimedia, MM 2012, Nara, Japan, October 29 - November 2*, (pp. 1461-1464) Nara, Japan: ACM. (Published)

FashionAsk: Pushing community answers to your fingertips, by ZHANG, Wei; PANG, Lei; NGO, Chong-Wah. (2012). *Proceedings of the 20th ACM international conference on Multimedia, MM 2012, Nara, Japan, October 29 - November 2*, (pp. 1345-1346) Nara, Japan: ACM. (Published)

Community as a connector: Associating faces with celebrity names in web videos, by CHEN, Zhineng; NGO, Chong-Wah; CAO, Juan; ZHANG, Wei. (2012). *Proceedings of the 20th ACM international conference on Multimedia, MM 2012, Nara, Japan, October 29 - November 2*, (pp. 809-812) Nara, Japan: ACM. (Published)

Predicting domain adaptivity: Redo or recycle?, by YAO, Ting; NGO, Chong-Wah; ZHU, Shiai. (2012). *Proceedings of the 20th ACM international conference on Multimedia, MM 2012, Nara, Japan, October 29 - November 2*, (pp. 821-824) Nara, Japan: ACM. (Published)

Trajectory-based modeling of human actions with motion reference points, by JIANG, Yu-Gang; DAI, Qi; XUE, Xiangyang; LIU, Wei; NGO, Chong-Wah. (2012). *Proceedings of the 12th European Conference on Computer Vision, Florence, Italy, 2012 October 7-13*, (pp. 425-438) Florence, Italy: SpringerLink. (Published)

Mining multiple visual appearances of semantics for image annotation, by TAN, Hung-Khoon; NGO, Chong-Wah. (2007). *Proceedings of the 13th International Multimedia Modeling Conference, MMM 2007, Singapore, January 9-12*, (pp. 269-278) Singapore: SpringerLink. (Published)

Context-based friend suggestion in online photo-sharing community, by YAO, Ting; NGO, Chong-Wah; MEI, Tao. (2011). *Proceedings of the 19th ACM International Conference on Multimedia ACM Multimedia 2011, MM'11, Scottsdale, Arizona, November 28 - December 1*, (pp. 945-948) Scottsdale, Arizona: ACM. (Published)

Galaxy browser: Exploratory search of web videos, by PANG, Lei; TAN, Song; TAN, Hung-Khoon; NGO, Chong-Wah. (2011). *Proceedings of the 19th ACM International Conference on Multimedia ACM Multimedia 2011, MM'11, Scottsdale, Arizona, November 28 - December 1*, (pp. 803-804) Scottsdale, Arizona: ACM. (Published)

On the pooling of positive examples with ontology for visual concept learning, by ZHU, Shiai; NGO, Chong-Wah; JIANG, Yu-Gang. (2011). *Proceedings of the 19th ACM International Conference on Multimedia ACM Multimedia 2011, MM'11, Scottsdale, Arizona, November 28 - December 1*, (pp. 1045-1048) Scottsdale, Arizona: ACM. (Published)

Cross media hyperlinking for search topic browsing, by TAN, Song; NGO, Chong-Wah; TAN, Hung-Khoon; PANG, Lei. (2011). *Proceedings of the 19th ACM International Conference on Multimedia ACM Multimedia 2011, MM'11, Scottsdale, Arizona, November 28 - December 1*, (pp. 243-252) Scottsdale, Arizona: ACM. (Published)

Towards textually describing complex video contents with audio-visual concept classifiers, by TAN, Chun Chet; JIANG, Yu-Gang; NGO, Chong-Wah. (2011). *Proceedings of the 19th ACM International Conference on Multimedia ACM Multimedia 2011, MM'11, Scottsdale, Arizona, November 28 - December 1*, (pp. 655-658) Scottsdale, Arizona: ACM. (Published)

Fusing heterogeneous modalities for video and image re-ranking, by TAN, Hung-Khoon; NGO, Chong-Wah. (2011). *Proceedings of the 1st ACM International Conference on Multimedia Retrieval: ICMR '11, Trento, Italy, April 17-20*, (pp. 1-8) Trento, Italy: ACM. (Published)

Topical summarization of web videos by visual-text time-dependent alignment, by TAN, Song; TAN, Hung-Khoon; NGO, Chong-Wah. (2010). *Proceedings of the 18th ACM International Conference on Multimedia ACM Multimedia, MM2010, Firenze, Italy, October 25-29*, (pp. 1095-1098) Firenze, Italy: ACM. (Published)

Trajectory-based visualization of web video topics, by CAO, Juan; NGO, Chong-Wah; ZHANG, Yong-Dong; ZHANG, Dong-Ming; MA, Liang. (2010). *Proceedings of the 18th ACM International Conference on Multimedia ACM Multimedia, MM2010, Firenze, Italy, October 25-29*, (pp. 1639-1642) Firenze, Italy: ACM. (Published)

- Automatic generation of semantic fields for annotating web images, by WANG, Gang; CHUA, Tat Seng; NGO, Chong-Wah; WANG, Yong Cheng. (2010). *Proceedings of the 23rd International Conference on Computational Linguistics, Coling 2010, Beijing, August 23-27*, (pp. 1301-1309) Beijing, China: ACM. (Published)
- On the sampling of web images for learning visual concept classifiers, by ZHU, Shiai; WANG, Gang; NGO, Chong-Wah; JIANG, Yu-Gang. (2010). *Proceedings of the ACM International Conference on Image and Video Retrieval, ACM-CIVR 2010, Xian, China, July 5-7*, (pp. 50-57) Xi'an, China: ACM. (Published)
- Co-reranking by mutual reinforcement for image search, by YAO, Ting; MEI, Tao; NGO, Chong-Wah. (2010). *Proceedings of the ACM International Conference on Image and Video Retrieval, ACM-CIVR 2010, Xian, China, July 5-7*, (pp. 34-41) Xi'an, China: ACM. (Published)
- Coherent bag-of audio words model for efficient large-scale video copy detection, by LIU, Yang; ZHAO, Wan-Lei; NGO, Chong-Wah; XU, Chang-Sheng; LU, Han-Qing. (2010). *Proceedings of the ACM International Conference on Image and Video Retrieval, ACM-CIVR 2010, Xian, China, July 5-7*, (pp. 89-96) Xi'an, China: ACM. (Published)
- Semantic context modeling with maximal margin conditional random fields for automatic image annotation, by XIANG, Yu; ZHOU, Xiangdong; LIU, Zuotao; CHUA, Tat-Seng; NGO, Chong-Wah. (2010). *Proceedings of 2010 IEEE Computer Society Conference on Computer Vision and Pattern Recognition, CVPR 2010, San Francisco, June 13-18*, (pp. 3368-3375) San Francisco: IEEE. (Published)
- PageSense: Style-wise web page advertising, by LI, Lusong; MEI, Tao; NIU, Xiang; NGO, Chong-Wah. (2010). *Proceedings of the 19th International World Wide Web Conference, WWW2010, Raleigh, April 26-30*, (pp. 1273-1276) Raleigh: ACM. (Published)
- Localizing volumetric motion for action recognition in realistic videos, by WU, Xiao; NGO, Chong-Wah; LI, Jintao; ZHANG, Yongdong. (2009). *Proceedings of the 17th ACM International Conference on Multimedia, MM'09, Beijing China, 2009 October 19-24*, (pp. 505-508) Beijing, China: ACM. (Published)
- Towards Google challenge: Combining contextual and social information for web video categorization, by WU, Xiao; ZHAO, Wan-Lei; NGO, Chong-Wah. (2009). *Proceedings of the 17th ACM international conference on Multimedia, MM'09, Beijing, China, October 19-24*, (pp. 1109-1110) Beijing, China: ACM. (Published)
- Semantic context transfer across heterogeneous sources for domain adaptive video search, by JIANG, Yu-Gang; NGO, Chong-Wah; CHANG, Shih-Fu. (2009). *Proceedings of the 17th ACM international conference on Multimedia, MM'09, Beijing, China, October 19-24*, (pp. 155-164) Beijing, China: ACM. (Published)
- Scalable detection of partial near-duplicate videos by visual-temporal consistency, by TAN, Hung-Khoon; NGO, Chong-Wah; HONG, Richang; CHUA, Tat-Seng. (2009). *Proceedings of the 17th ACM international conference on Multimedia, MM'09, Beijing, China, October 19-24*, (pp. 145-154) Beijing, China: ACM. (Published)
- Distribution-based concept selection for concept-based video retrieval, by CAO, Juan; JING, HongFang; NGO, Chong-Wah; ZHANG, YongDong. (2009). *Proceedings of the 17th ACM international conference on Multimedia, MM'09, Beijing, China, October 19-24*, (pp. 645-648) Beijing, China: ACM. (Published)
- Domain adaptive semantic diffusion for large scale context-based video annotation, by JIANG, Yu-Gang; WANG, Jun; CHANG, Shih-Fu; NGO, Chong-Wah. (2009). *Proceedings of the 12th International Conference on Computer Vision, ICCV 2009, Kyoto, Japan, September 29 - October 2*, (pp. 1420-1427) Kyoto, Japan: IEEE. (Published)
- Exploring inter-concept relationship with context space for semantic video indexing, by WEI, Xiao-Yong; JIANG, Yu-Gang; NGO, Chong-Wah. (2009). *Proceedings of the ACM International Conference on Image and Video Retrieval, CIVR 2009, Santorini, July 8-10*, (pp. 108-115) Santorini: ACM. (Published)
- Large-scale near-duplicate web video search: Challenge and opportunity, by ZHAO, Wan-Lei; TAN, Song; NGO, Chong-Wah. (2009). *Proceedings of 2009 IEEE International Conference on Multimedia and Expo, ICME 2009, New York, June 28 - July 3*, (pp. 1624-1627) New York: IEEE. (Published)
- A revisit of generative model for automatic image annotation using markov random fields, by XIANG, Yu; ZHOU, Xiangdong; CHUA, Tat-Seng; NGO, Chong-Wah. (2009). *Proceedings of 2009 IEEE Computer Society Conference on Computer Vision and Pattern Recognition, Miami, June 20-25*, (pp. 1153-1160)

Miami: IEEE Computer Society. (Published)

Fusing semantics, observability, reliability and diversity of concept detectors for video search, by WEI, Xiao-Yong; NGO, Chong-Wah. (2008). *Proceedings of the 16th ACM International Conference on Multimedia, MM '08, Vancouver, 2008 October 26-31*, (pp. 81-90) Vancouver, Canada: ACM. (Published)

Video event detection using motion relativity and visual relatedness, by WANG, Feng; JIANG, Yu-Gang; NGO, Chong-Wah. (2008). *Proceedings of the 16th ACM International Conference on Multimedia, MM '08, Vancouver, 2008 October 26-31*, (pp. 239-248) Vancouver, Canada: ACM. (Published)

Accelerating near-duplicate video matching by combining visual similarity and alignment distortion, by TAN, Hung-Khoon; WU, Xiao; NGO, Chong-Wah; ZHAO, Wan-Lei. (2008). *Proceedings of the 16th ACM International Conference on Multimedia, MM '08, Vancouver, 2008 October 26-31*, (pp. 861-864) Vancouver, Canada: (Published)

Modeling video hyperlinks with hypergraph for web video reranking, by TAN, Hung-Khoon; NGO, Chong-Wah; WU, Xiao. (2008). *Proceedings of the 16th ACM International Conference on Multimedia, MM '08, Vancouver, 2008 October 26-31*, (pp. 659-662) Vancouver, Canada: ACM. (Published)

Ontology-based visual word matching for near-duplicate retrieval, by JIANG, Yu-Gang; NGO, Chong-Wah. (2008). *Proceedings of 2008 IEEE International Conference on Multimedia and Expo, ICME 2008, Hannover, Germany, June 23-26*, (pp. 125-128) Hannover, Germany: IEEE. (Published)

Bag-of-visual-words expansion using visual relatedness for video indexing, by JIANG, Yu-Gang; NGO, Chong-Wah. (2008). *Proceedings of the 31st annual international ACM SIGIR conference on Research and development in information retrieval, SIGIR 2008, Singapore July 20-24*, (pp. 769-770) Singapore: ACM. (Published)

Novelty detection for cross-lingual news stories with visual duplicates and speech transcripts, by WU, Xiao; HAUPTMANN, Alexander G.; NGO, Chong-Wah. (2007). *Proceedings of the 15th ACM International Conference on Multimedia, Augsburg Germany, 2007 September 25-29*, (pp. 168-177) New York: ACM. (Published)

Evaluating bag-of-visual-words representations in scene classification, by YANG, Jun; JIANG, Yu-Gang; HAUPTMANN, Alexander G.; NGO, Chong-Wah. (2007). *Proceedings of the international workshop on Workshop on multimedia information retrieval: MIR07, Augsburg, Bavaria, September 28-29*, (pp. 197-206) Augsburg, Bavaria: ACM. (Published)

Ontology-enriched semantic space for video search, by WEI, Xiao-Yong; CHO, Chong-Wah. (2007). *Proceedings of the 15th ACM International Conference on Multimedia, MM2007, Augsburg, Bavaria, September 23-28*, (pp. 981-990) Augsburg, Bavaria: ACM. (Published)

Rushes video summarization by object and event understanding, by WANG, Feng; NGO, Chong-Wah. (2007). *Proceedings of the international workshop on TRECVID video summarization, TVS'07, Augsburg, Bavaria, September 28*, (pp. 25-29) Augsburg, Bavaria: ACM. (Published)

Practical elimination of near-duplicates from Web video search, by WU, Xiao; HAUPTMANN, Alexander G.; NGO, Chong-Wah. (2007). *Proceedings of the 15th ACM International Conference on Multimedia, MM2007, Augsburg, Bavaria, September 23-28*, (pp. 218-227) Augsburg, Bavaria: ACM. (Published)

Towards optimal bag-of-features for object categorization and semantic video retrieval, by JIANG, Yu-Gang; NGO, Chong-Wah; YANG, Jun. (2007). *Proceedings of the 6th ACM international conference on Image and video retrieval, CIVR 2007, Amsterdam, July 9 - 11*, (pp. 494-501) Amsterdam: ACM. (Published)

Near-duplicate keyframe retrieval with visual keywords and semantic context, by WU, Xiao; ZHAO, Wan-Lei; NGO, Chong-Wah. (2007). *Proceedings of the 6th ACM international conference on Image and video retrieval, CIVR 2007, Amsterdam, July 9 - 11*, (pp. 162-169) Amsterdam: ACM. (Published)

Efficient near-duplicate keyframe retrieval with visual language models, by WU, Xiao; ZHAO, Wan-Lei; NGO, Chong-Wah. (2007). *Proceedings of 2007 International Conference on Multimedia & Expo, Beijing July 2-5*, (pp. 500-503) Beijing, China: IEEE Computer Society. (Published)

Audio similarity measure by graph modeling and matching, by PENG, Yuxin; NGO, Chong-Wah; FANG, Cuihua; CHEN, Xiaoou; XIAO, Jianguo. (2006). *Proceedings of the 14th ACM international conference on Multimedia, MM 2006, Santa Barbara, California, October 23-27*, (pp. 603-606) Santa Barbara, California:

ACM. (Published)

Fast tracking of near-duplicate keyframes in broadcast domain with transitivity propagation, by NGO, Chong-Wah; ZHAO, Wan-Lei; JIANG, Yu-Gang. (2006). *Proceedings of the 14th ACM international conference on Multimedia, MM 2006, Santa Barbara, California, October 23-27*, (pp. 845-854) Santa Barbara, California: ACM. (Published)

A mobile lecture slide organization tool for students, by CHOW, K.O.; NGO, C.W.; IP H.H.S.; CHEUNG, K.S.. (2006). *Proceedings of 2006 1st International Symposium on Pervasive Computing and Applications, Urumqi, China, August 3-5*, (pp. 354-357) Urumqi, China: IEEE Computer Society. (Published)

Keyframe retrieval by keypoints: Can point-to-point matching help?, by ZHAO, Wanlei; JIANG, Yu-Gang; NGO, Chong-Wah. (2006). *Proceedings of the 5th International Conference, CIVR 2006, Tempe, AZ, USA, July 13-15*, (pp. 72-81) Tempe: SpringerLink. (Published)

Hierarchical hidden Markov model for rushes structuring and indexing, by NGO, Chong-Wah; PAN, Zailiang; WEI, Xiaoyong. (2006). *Proceedings of the 5th International Conference on Image and Video Retrieval, CIVR 2006, Tempe, AZ, USA, July 13-15*, (pp. 241-250) Tempe: SpringerLink. (Published)

Prediction-based gesture detection in lecture videos by combining visual, speech and electronic slides, by WANG, Feng; NGO, Chong-Wah; PONG, Ting-Chuen. (2006). *Proceedings of the 2006 IEEE International Conference on Multimedia and Expo, ICME 2006, Toronto, Canada, July 9-12*, (pp. 653-656) Toronto, Canada: IEEE. (Published)

Exploiting self-adaptive posture-based focus estimation for lecture video editing, by WANG, Feng; NGO, Chong-Wah; PONG, Ting-Chuen. (2005). *Proceedings of the 13th ACM International Conference on Multimedia, MM 2005, Singapore, November 6-11*, (pp. 327-330) Singapore: ACM. (Published)

Common pattern discovery using earth mover's distance and local flow maximization, by TAN, Hung-Khoon; NGO, Chong-Wah. (2005). *Proceedings of the 10th IEEE International Conference on Computer Vision, ICCV 2005, Beijing, China, October 17-21*, (pp. 1222-1229) Beijing, China: IEEE. (Published)

EMD-based video clip retrieval by many-to-many matching, by PENG, Yuxin; NGO, Chong-Wah. (2005). *Proceedings of the 4th International Conference on Image and Video Retrieval, CIVR 2005, Singapore, July 20-22*, (pp. 71-81) Singapore: Springer Verlag. (Published)

Hot event detection and summarization by graph modeling and matching, by PENG, Yuxin; NGO, Chong-Wah. (2005). *Proceedings of the 4th International Conference on Image and Video Retrieval (CIVR), Singapore, 2005 July 20-22*, (pp. 257-266) Singapore: SpringerLink. (Published)

Multibiometrics based on palmprint and handgeometry, by WEI, Xiao-Yong; XU, Dan; NGO, Chong-Wah. (2005). *Proceedings of the 4th Annual ACIS International Conference on Computer and Information Science, ICIS 2005, Jeju Island, South Korea, 2005 July 14-16*, (pp. 495-500) Jeju Island, South Korea: IEEE. (Published)

Co-clustering of time-evolving news story with transcript and keyframe, by WU, Xiao; NGO, Chong-Wah; LI, Qing. (2005). *Proceedings of 2005 IEEE International Conference on Multimedia and Expo, Amsterdam, July 6*, (pp. 117-120) Amsterdam: IEEE. (Published)

A robust method for recovering geometric proxy from multiple panoramic images, by WAN, Ada S. K.; SIU, Angus M. K.; LAU, Rynson W. H.; NGO, Chong-Wah. (2004). *Proceedings of 2004 International Conference on Image Processing, ICIP '04, Singapore October 24-27*, (pp. 1369-1372) Singapore: IEEE. (Published)

Deformable object model matching by topological and geometric similarity, by TAN, Kwok-Leung; LAU, Rynson W. H.; NGO, Chong-Wah. (2004). *Proceedings of Computer Graphics International, GI 2004, Crete, June 19*, (pp. 335-342) Crete: IEEE. (Published)

Indexing and matching of polyphonic songs for query-by-singing system, by LEUNG, Tat-Wan; NGO, Chong-Wah. (2004). *Proceedings of the 12th ACM International Conference on Multimedia, New York, 2004 October 10-16*, (pp. 308-311) New York: ACM. (Published)

Structuring home video by snippet detection and pattern parsing, by PAN, Zailiang; NGO, Chong-Wah. (2004). *Proceedings of the 6th ACM SIGMM International Workshop on Multimedia Information Retrieval, New York, 2004 October 15-16*, (pp. 69-76) New York: Association for Computing Machinery (ACM).

(Published)

Clip-based similarity measure for hierarchical video retrieval, by PENG, Yuxin; NGO, Chong-Wah. (2004). *Proceedings of the 6th ACM SIGMM International Workshop on Multimedia Information Retrieval, New York, October 15-16*, (pp. 53-60) New York: ACM. (Published)

Novel seed selection for multiple objects detection and tracking, by PAN, Zailiang; NGO, Chong-Wah. (2004). *Proceedings of the 17th International Conference on Pattern Recognition, ICPR 2004, Cambridge, UK, 2004 August 23-26*, (pp. 744-747) Cambridge: IEEE. (Published)

Graph based image matching, by JIANG, Hui; NGO, Chong-Wah. (2004). *Proceedings of the 17th International Conference on Pattern Recognition, ICPR 2004, Cambridge, UK, 2004 August 23-26*, (pp. 658-661) Cambridge: IEEE. (Published)

Deformable geometry model matching by topological and geometric signatures, by TAM, Kwok-Leung; LAW, Rynson W.H.; NGO, Chong-Wah. (2004). *Proceedings of the 17th International Conference on Pattern Recognition, ICPR 2004, Cambridge, UK, 2004 August 23-26*, (pp. 910-913) Cambridge: IEEE. (Published)

Gesture tracking and recognition for lecture video editing, by WANG, Feng; NGO, Chong-Wah; PONG, Ting-Chuen. (2004). *Proceedings of the 17th International Conference on Pattern Recognition, ICPR 2004, Cambridge, UK, 2004 August 23-26*, (pp. 934-937) Cambridge: IEEE. (Published)

ICA-FX features for classification of singing voice and instrumental sound, by LEUNG, Tat-Wan; NGO, Chong-Wah; LAU, Rynson W. H. (2004). *Proceedings of the 17th International Conference on Pattern Recognition, ICPR 2004, Cambridge, UK, 2004 August 23-26*, (pp. 367-370) Cambridge: IEEE. (Published)

Structuring lecture videos for distance learning applications, by NGO, Chong-Wah; WANG, Feng; PONG, Ting-Chuen. (2003). *Proceedings of 5th IEEE International Symposium on Multimedia Software Engineering, ISMSE 2003, Taichung, Taiwan, December 10-12*, (pp. 215-222) Taichung: IEEE. (Published)

Synchronization of lecture videos and electronic slides by video text analysis, by WANG, Feng; NGO, Chong-Wah; PONG, Ting-Chuen. (2003). *Proceedings of the 11th ACM International Conference on Multimedia, MM'03, Berkeley, California, November 2-8*, (pp. 315-318) Berkeley, California: ACM. (Published)

A robust dissolve detector by support vector machine, by NGO, Chong-Wah. (2003). *Proceedings of the 11th ACM International Conference on Multimedia, MM'03, Berkeley, California, November 2-8*, (pp. 283-286) Berkeley, California: ACM. (Published)

Automatic video summarization by graph modeling, by NGO, Chong-Wah; MA, Yu-Fei; ZHANG, Hong-Jiang. (2003). *Proceedings of the 9th IEEE International Conference on Computer Vision, Nice, France, 2003 October 13-16*, (pp. 104-109) Nice, France: IEEE. (Published)

Detection of documentary scene changes by audio-visual fusion, by VELIVELLI, Atulya; NGO, Chong-Wah; HUANG, Thomas S.. (2003). *Proceedings of 2nd International Conference on Image and Video Retrieval, CIVR 2003, Urbana-Champaign, US, July 24-25*, (pp. 227-237) Urbana: SpringerLink. (Published)

Trifocal morphing, by SIU, Angus M. K.; WAN, Ada S. K.; LAU, Rynson W. H.; NGO, Chong-Wah. (2003). *Proceedings of the 7th International Conference on Information Visualization, IV 2003, London, July 16-18*, (pp. 24-29) London: Institute of Electrical and Electronics Engineers Inc. (Published)

Video clip retrieval by maximal matching and optimal matching in graph theory, by PENG, Yu-Xin; NGO, Chong-Wah; DONG, Qing-Jie; GUO, Zong-Ming; XIAO, Jian-Guo. (2003). *Proceedings of 2003 International Conference on Multimedia and Expo, Baltimore, Maryland, July 6-9*, (pp. 317-320) Baltimore: IEEE Computer Society. (Published)

Motion retrieval by temporal slices analysis, by NGO, Chong-Wah; PONG, Ting-Chuen; ZHANG, Hong-Jiang. (2002). *Proceedings of the 16th International Conference on Pattern Recognition, Quebec City, Quebec, Canada, 2002 August 11-15*, (pp. 64-67) Quebec City, Quebec, Canada: IEEE. (Published)

Detection of slide transition for topic indexing, by NGO, Chong-Wah; PONG, Ting-Chuen; HUANG, Thomas S.. (2002). *Proceedings of 2002 IEEE International Conference on Multimedia and Expo, ICME 2002 Lausanne, Switzerland, August 26-29*, (pp. 533-536) Lausanne: Institute of Electrical and Electronics Engineers Inc. (Published)

- Integrating color and spatial features for content-based video retrieval, by LIN, Tong; NGO, Chong-Wah; ZHANG, Hong-Jiang; SHI, Qing-Yun. (2001). *Proceedings 2001 International Conference on Image Processing, Thessaloniki, Greece, October 7-10*, (pp. 592-595) Thessaloniki, Greece: IEEE. (Published)
- On clustering and retrieval of video shots, by NGO, Chong-Wah; PONG, Ting-Chuen; ZHANG, Hong-Jiang. (2001). *Proceedings of the 9th ACM International Conference on Multimedia, Ottawa, Canada, 2001 September 30 - October 5*, (pp. 51-60) Ottawa, Canada: Association for Computing Machinery (ACM). (Published)
- Motion-based video representation for scene change detection, by NGO, Chong-Wah; PONG, Ting-Chuen; ZHANG, Hong-Jiang; CHIN, Roland T.. (2000). *Proceedings 15th International Conference on Pattern Recognition, ICPR-2000, Barcelona, Spain, September 3-7*, (pp. 827-830) Barcelona, Spain: IEEE. (Published)
- Motion characterization by temporal slices analysis, by NGO, Chong-Wah; PONG, Ting-Chuen; ZHANG, Hong-Jiang; CHIN, Roland T.. (2000). *2000 IEEE Conference on Computer Vision and Pattern Recognition CVPR: Hilton Head, SC, June 15: Proceedings*, (pp. 768-773) Los Alamitos, CA: IEEE Computer Society. <https://doi.org/10.1109/CVPR.2000.854952> (Published)
- Detection of gradual transitions through temporal slice analysis, by NGO, C. W.; PONG, T. C.; CHIN, R. T.. (1999). *Proceedings of the 1999 IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR'99), Fort Collins, Colorado, June 23-25*, (pp. 36-41) Fort Collins, Colorado: IEEE. (Published)
- Camera break detection by partitioning of 2D spatio-temporal images in MPEG domain, by NGO, Chong-Wah. (1999). *Proceedings of the 1999 International Conference on Multimedia Computing and Systems, Florence, Italy, June 7-11*, (pp. 750-755) Los Alamitos, CA, United States: IEEE. (Published)
- A high speed distributed file system for multimedia communications, by CHEE, C. L.; ERDOGAN, S. S.; NGO, C. W.; WONG, C. K. . (1995). *Proceedings of TENCON'94 - 1994 IEEE Region 10's 9th Annual International Conference on: 'Frontiers of Computer Technology', Singapore, August 22-26*, (pp. 254-258) Piscataway, NJ, United States: IEEE. (Published)

Conference Papers

- VIREO @ TRECVID 2021 ad-hoc video search, by WU, Jiaxin; NGUYEN, Phuong Anh; NGO, Chong-Wah. (2020). *TRECVID 2021, Gaithersburg, December 7-10, Gaithersburg*. (Published)
- Vireo-TNO @ TRecviD 2014 zero-shot event detection and recounting, by LU, Yi-Jie; ZHANG, Hao; NGO, Chong-Wah; DE BOER, Maaïke; SCHAVEMAKER, John; SCHUTTE, Klamer; KRAAIJ, Wessel. (2020). *2014 TREC Video Retrieval Evaluation, TRECVID 2014, November 10-14, Orlando*. (Published)
- VireoJD-MM @ TRECVID 2019: Activities in extended video (ACTEV), by HOU, Zhijian; PAN, Ying-Wei; YAO, Ting; NGO, Chong-Wah . (2020). *TRECVID 2019 TREC Video Retrieval Evaluation, Gaithersburg, November 12-13, Gaithersburg*. (Published)
- EURECOM at TRECVID AVS 2019, by FRANCIS, Danny; NGUYEN, Phuong Anh; HUET, Benoit; NGO, Chong-Wah. (2019). *2019 TREC Video Retrieval Evaluation, TRECVID 2019, Gaithersburg, November 12-13, Gaithersburg*. (Published)
- Vireo @ TRecViD 2017: Video-to-text, ad-hoc video search and video hyperlinking, by NGUYEN, Phuong Anh; LI, Qing; CHENG, Zhi-Qi; LU, Yi-Jie; ZHANG, Hao; WU, Xiao; NGO, Chong-Wah. (2017). *2017 TREC Video Retrieval Evaluation, TRECVID 2017, Gaithersburg, November 13-15, Gaithersburg*. (Published)
- Minimizing risk in video hyperlinking, by NGO, Chong-Wah; CHENG, Zhi-Qi; WU, Xiao. (2017). *2017 TREC Video Retrieval Evaluation, TRECVID 2017, Gaithersburg, November 13-15, Gaithersburg*. (Published)
- VIREO@TRECVID 2016: Multimedia event detection, ad-hoc video search, video to text description, by ZHANG, Hao; PANG, Lei; LU, Yi-Jie; NGO, Chong-Wah. (2016). *2016 TREC Video Retrieval Evaluation, TRECVID 2016, Gaithersburg, USA, November 14-16, Gaithersburg*. (Published)
- Multimedia event detection: Strong by integration, by ZHANG, Hao; DE BOER, Maaïke; LU, Yi-Jie; SCHUTTE, Klamer; KRAAIJ, Wessel; NGO, Chong-Wah. (2015). *2015 TREC Video Retrieval Evaluation, TRECVID 2015, Gaithersburg, November 16-18, Gaithersburg*. (Published)

- Vireo-Tno @ TRECVID 2015: Multimedia event detection, by ZHANG, Hao; LU, Yi-Jie; DE BOER, Maaïke; TER HAAR, Frank; QIU, Zhaofan; SCHUTTE, Klamer; KRAAIJ, Wessel; NGO, Chong-Wah. (2015). *2015 TREC Video Retrieval Evaluation, TRECVID 2015, Gaithersburg, November 16-18, Gaithersburg.* (Published)
- Direct or indirect match? Selecting right concepts for zero-example case, by LU, Yi-Jie; DE BOER, Maaïke; ZHANG, Hao; SCHUTTE, Klamer; KRAAIJ, Wessel; NGO, Chong-Wah. (2015). *2015 TREC Video Retrieval Evaluation, TRECVID 2015, Gaithersburg, November 16-18, Gaithersburg.* (Published)
- Vireo-Tno @ TRECVID 2014: Multimedia event detection and recounting (MED and MER), by NGO, Chong-Wah; LU, Yi-Jie; ZHANG, Hao; YAO, Ting; TAN, Chun-Chet; PANG, Lei; DE BOER, Maaïke; SCHAVEMAKER, John; SCHUTTE, Klamer; KRAAIJ, Wessel. (2020). *2014 TREC Video Retrieval Evaluation, TRECVID 2014, Orlando, November 10-12, Orlando.* (Published)
- Vireo @ TRECVID 2014: Instance search and semantic indexing, by ZHANG, Wei; ZHANG, Hao; YAO, Ting; LU, Yijie; CHEN, Jingjing; NGO, Chong-Wah. (2020). *2014 TREC Video Retrieval Evaluation, TRECVID 2014, Orlando, November 10-12, Orlando.* (Published)
- Search of small objects by topology matching, context modeling, and pattern mining, by ZHANG, Wei; NGO, Chong-Wah. (2013). *TRECVID 2013 TREC Video Retrieval Evaluation, Gaithersburg, November 20-22, Gaithersburg.* (Published)
- Vireo/ECNU @ TRECVID 2013: A video dance of detection, recounting and search with motion relativity and concept learning from wild, by NGO, Chong-Wah; WANG, Feng; ZHANG, Wei; TAN, Chun-Chet; SUN, Zhanhu; ZHU, Shi-Ai; YAO, Ting. (2013). *TRECVID 2013 TREC Video Retrieval Evaluation, Gaithersburg, November 20-22, Gaithersburg.* (Published)
- The vireo team at MediaEval 2013: Violent Scenes Detection by mid-level concepts learnt from youtube, by TAN, Chun Chet; NGO, Chong-Wah. (2013). *Multimedia Benchmark Workshop, MediaEval 2013, Barcelona, Spain, October 18-19, Barcelona.* (Published)
- VIREO@TRECVID 2012: Searching with topology, recounting will small concepts, learning with free examples, by ZHANG, Wei; TAN, Chun-Chet; ZHU, Shi-Ai; YAO, Ting; PANG, Lei; NGO, Chong-Wah. (2012). *TREC Video Retrieval Evaluation, TRECVID 2012, Gaithersburg, November 26-28, Gaithersburg.* (Published)
- The shanghai-hongkong team at mediaeval2012: Violent scene detection using trajectory-based features, by JIANG, Yu-Gang; DAI, Qi; TAN, Chun Chet; XUE, Xiangyang; NGO, Chong-Wah. (2012). *Multimedia Benchmark Workshop, MediaEval 2012, Pisa, Italy, October 4-5, Pisa, Italy.* (Published)
- VIREO@TRECVID 2011: Instance search, semantic indexing, multimedia event detection and known-item search, by NGO, Chong-Wah; ZHU, Shi-Ai; ZHANG, Wei; TAN, Chun-Chet; YAO, Ting; PANG, Lei; TAN, Hung-Khoon. (2011). *TREC Video Retrieval Evaluation, TRECVID 2011, Gaithersburg, December 5-7, Gaithersburg.* (Published)
- VIREO at TRECVID 2010: Semantic indexing, known-item search, and content-based copy detection, by NGO, Chong-Wah; ZHU, Shi-Ai; TAN, Hung-Khoon; ZHAO, Wan-Lei. (2010). *TREC Video Retrieval Evaluation, TRECVID 2010, Gaithersburg, November 15-17, Gaithersburg.* (Published)
- VIREO/DVMM at TRECVID 2009: High-level feature extraction, automatic video search, and content-based copy detection, by NGO, Chong-Wah; JIANG, Yu-Gang; WEI, Xiao-Yong; ZHAO, Wanlei; LIU, Yang; WANG, Jun; ZHU, Shiai; CHANG, Shih-Fu. (2009). *TREC Video Retrieval Evaluation, TRECVID 2009, Gaithersburg, November 16-17, Gaithersburg.* (Published)
- Beyond semantic search: What you observe may not be what you think, by NGO, Chong-Wah; JIANG, Yu-Gang; WEI, Xiaoyong; ZHAO, Wanlei; WANG, Feng; WU, Xiao; TAN, Hung-Khoon. (2008). *TREC Video Retrieval Evaluation, TRECVID 2008, Gaithersburg, November 17-18, Gaithersburg.* (Published)
- Concept detection: Convergence to local features and opportunities beyond, by CHANG, Shih-Fu; HE, Junfeng; JIANG, Yu-Gang; EL KHOURY, Elie; NGO, Chong-Wah; YANAGAWA, Akira; ZAVESKY, Eric. (2008). *TREC Video Retrieval Evaluation, TRECVID 2008, Columbia University, October 26, Columbia University.* (Published)
- Columbia University/VIREO-cityU/IRIT TRECVID2008 high-level feature extraction and interactive video search, by CHANG, Shih-Fu; HE, Junfeng; JIANG, Yu-Gang; EL KHOURY, Elie; NGO, Chong-Wah; YANAGAWA, Akira; ZAVESKY, Eric. (2008). *TREC Video Retrieval Evaluation, TRECVID 2008, Columbia*

University, October 26, Columbia University. (Published)

Experimenting VIREO-374: Bag-of-visual-words and visual-based ontology for semantic video indexing and search, by NGO, Chong-Wah; JIANG, Yu-Gang; WEI, Xiaoyong; WANG, Feng; ZHAO, Wanlei; TAN, Hung-Khoon; WU, Xiao. (2007). *TREC Video Retrieval Evaluation, TRECVID 2007, Gaithersburg, November 5-6, Gaithersburg*. (Published)

Modeling local interest points for semantic detection and video search at TRECVID 2006, by JIANG, Yu-Gang; WEI, Xiaoyong; NGO, Chong-Wah; TAN, Hung-Khoon; ZHAO, Wanlei; WU, Xiao. (2006). *TREC Video Retrieval Evaluation, TRECVID 2006, Gaithersburg, November 13-14, Gaithersburg*. (Published)

Motion-based approach for BBC rushes structuring and characterization, by NGO, Chong-Wah; PAN, Zailiang. (2005). *TREC Video Retrieval Evaluation, TRECVID 2005, Gaithersburg, November 14-15, Gaithersburg*. (Published)

Research Grants

Singapore Management University

Interpretable Embedding for Interactive Video Search, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): NGO Chong Wah, 2020, S\$98,950

Other Institutions

Automated CWD Detection with Machine Learning for Vessel-based Line Transect Survey, Marine Ecology Enhancement Fund, Hong Kong Airport Authority Co-PI (Project Level): NGO Chong Wah, 2020

Sport Video Analysis and Retrieval, Innovation and Technology Support Programme, Innovation and Technology Fund, Hong Kong PI (Project Level): NGO Chong Wah, 2019

Query-aware Video Recounting, Attention, Captioning, Indexing, General Program, National Natural Science of Foundation of China (NSFC) Co-PI (Project Level): NGO Chong Wah, 2019

S3: A Multi-perspective Video Search Paradigm, France/Hong Kong Joint Research Scheme, Research Grants Council (RGC) of Hong Kong PI (Project Level): NGO Chong Wah, 2018

Chinese Food Scanner: Modeling Ingredient Composition from Multimedia Perspective, General Research Fund, Research Grants Council (RGC) of Hong Kong PI (Project Level): NGO Chong Wah, 2017

Multimedia Hyperlinking: From Similarity Ranking to Entity Linking, General Research Fund, Research Grants Council (RGC) of Hong Kong PI (Project Level): NGO Chong Wah, 2016

Zero-Shot Multimedia Event Detection and Evidence Localization, Microsoft Research Asia Collaborative Research Grant, Microsoft Research Asia PI (Project Level): NGO Chong Wah, 2015

A Joint Learning/MOOC Platform for Hong Kongs Tertiary Education Sector, Teaching and Learning Fund, University Grants Council (UGC) of Hong Kong Co-PI (Project Level): NGO Chong Wah, 2015

Beyond Relevancy: Multimedia Analytics for Exploratory Video Search, General Research Fund, Research Grants Council (RGC) of Hong Kong PI (Project Level): NGO Chong Wah, 2014

Big data pattern discovery based on multi-modal feature fusion, National High-tech R&D Program (863 program), Ministry of Science and Technology, China Co-PI (Project Level): NGO Chong Wah, 2014

Beyond Concept Annotation: Multimedia Event Detection and Recounting, General Research Fund, Research Grants Council (RGC) of Hong Kong PI (Project Level): NGO Chong Wah, 2013

Mobile Media Retrieval: From Instance Search to Question Answering, General Research Fund, Research Grants Council (RGC) of Hong Kong PI (Project Level): NGO Chong Wah, 2012

Large-Scale Exploratory Video Search by Social Networking, Microsoft Research Asia Windows Phone Academic Program, Microsoft Research Asia PI (Project Level): NGO Chong Wah, 2012

On the Fusion of Heterogeneous Modalities for Large-Scale Multimedia Search, General Program, National

Natural Science of Foundation of China (NSFC) PI (Project Level): NGO Chong Wah, 2012

Scalable Partial Near-Duplicate Search and Its Applications to Topical Video Browsing, General Research Fund, Research Grants Council (RGC) of Hong Kong PI (Project Level): NGO Chong Wah, 2010

Web-Scale Multimedia Search: From Semantic Detection to Cross-Media Reasoning, General Research Fund, Research Grants Council (RGC) of Hong Kong PI (Project Level): NGO Chong Wah, 2009

Multimedia-based Hyperlink Construction and Modeling for Web Video Search, General Research Fund, Research Grants Council (RGC) of Hong Kong PI (Project Level): NGO Chong Wah, 2008

Exploiting Interaction and Co-occurrence of Multi-modal Features for Early Fusion in Retrieval, General Research Fund, Research Grants Council (RGC) of Hong Kong PI (Project Level): NGO Chong Wah, 2006

Common Pattern Discovery in Images and Videos, General Research Fund, Research Grants Council (RGC) of Hong Kong PI (Project Level): NGO Chong Wah, 2005

A Spatio-temporal Framework for Video Representation and Retrieval, General Research Fund, Research Grants Council (RGC) of Hong Kong PI (Project Level): NGO Chong Wah, 2002

TEACHING

Courses Taught

Singapore Management University

Undergraduate Programmes :

Data Management

Operating System Concepts with Android

Postgraduate Professional Programmes :

Empirical Research Project 1

Introduction to Artificial Intelligence

THESES AND DISSERTATIONS

Theses and Dissertations Supervised

Other Institutions

Supervisor, "Towards Learning Compatible, self-explainable, transferable features for cross-modal recipe retrieval", Thesis by Bin Zhu , PhD, City University of Hong Kong, 2021

Supervisor, "Interactive Video Retrieval", Thesis by Phuong-Anh Nguyen , PhD, City University of Hong Kong, 2020

Supervisor, "Cross-Modal Cooking Recipe Retrieval", Thesis by Jing Jing Chen , PhD, City University of Hong Kong , 2018

Supervisor, "Zero-Example Multimedia Search Using Large-scale Knowledge Bank", Thesis by Yijie Lu , PhD, City University of Hong Kong , 2018

Supervisor, "Deep Fine-grained Video Representation for Large-scale Multimedia Retrieval and Recounting", Thesis by Hao Zhang , PhD, City University of Hong Kong, 2017

Supervisor, "Multimedia Content Understanding by Analyzing Perceived Signals: Face, Sentiment and Emotion", Thesis by Lei Pang , PhD, City University of Hong Kong , 2015

Supervisor, "Searching and Mining Visual Instances in Large-Scale Video Collection", Thesis by Wei Zhang , PhD, City University of Hong Kong , 2015

Supervisor, "Multimedia Search by Self, External and Crowdsourcing Knowledge, ACM SIGMM Outstanding Thesis Award", Thesis by Ting Yao , PhD, City University of Hong Kong, 2014

Supervisor, "Video Content Recounting by Commonsense Knowledge", Thesis by Chun Chet Tan , PhD, City University of Hong Kong , 2014

Supervisor, "Sampling Web Images for Large-scale Concept Learning", Thesis by Shiai Zhu , PhD, City University of Hong Kong , 2013

Supervisor, "Topical Video Browsing by Cross-Media and Cross-Source Linking", Thesis by Song Tan , PhD, City University of Hong Kong , 2013

Supervisor, "Algorithm and Techniques for Large-scale Near-duplicate Video Mining", Thesis by Wanlei Zhao , PhD, City University of Hong Kong , 2010

Supervisor, "Concept-based Video Search by Semantic and Context Reasoning", Thesis by Xiao-Yong Wei , PhD, City University of Hong Kong , 2010

Supervisor, "Video Hyperlinking for Multimedia Search", Thesis by Hung Khoon Tan , PhD, City University of Hong Kong , 2010

Supervisor, "Large-scale Semantic Concept Detection, Fusion and Selection for Domain Adaptive Video Search", Thesis by Yu-Gang Jiang , PhD, City University of Hong Kong , 2009

Supervisor, "On Clustering, Detection, and Threading of Topics for Large-scale Videos with Multiple Modalities", Thesis by Xiao Wu , PhD, City University of Hong Kong, 2008

Supervisor, "Common Pattern Discovery and Multiple Appearance Modeling for Visual Content Analysis", Thesis by Tan Hong Khoon , MPhil, City University of Hong Kong , 2007

Supervisor, "Content Parsing of Home Videos by Motion Analysis", Thesis by Zailiang Pan , MPhil, City University of Hong Kong , 2005

Supervisor, "Polyphonic Song Analysis and Representation for Query-by-singing Systems", Thesis by Tan-Wan Leung , MPhil, City University of Hong Kong , 2005

Theses and Dissertations Assessed

Other Institutions

Co Supervisor, "Video Content Analysis and Its Applications for Multimedia Authoring of Presentations", Thesis by Feng Wang , PhD, Hong Kong University of Science and Technology , 2006

Co Supervisor, "Modeling with Panoramic Image Network for Image-based Walkthroughs", Thesis by Sau Kuen Wan , MPhil, City University of Hong Kong , 2005

Co Supervisor, "Matching and Retrieval of 3D deformable models", Thesis by Kwok Leung Tam , MPhil, City University of Hong Kong , 2004

EXTERNAL SERVICE PROFESSIONAL

Core member, Hong Kong Computer Society, Artificial Intelligence Specialist Group , 2018 - Present
Steering Committee Member, ACM Multimedia Asia, 2017 - Present
Steering Committee Member, IEEE ICME 10K Award Committee , 2016 - 2018
Steering Committee Member, TRECVID, NIST USA , 2015 - Present
Editor Associate Editor, ITE Trans. on Media Technology and Applications , 2015 - Present
Steering Committee Member, ACM Conf. on Multimedia Retrieval , 2015 - Present
Editor Associate Editor, IET Computer Vision , 2015 - Present
Guest Editor, International Journal of Multimedia Tools and Applications , 2014
Guest Editor, IEEE Multimedia Magazine , 2013
Guest Editor, Multimedia Systems Journal , 2013
Editor Associate Editor, IEEE Trans. on Multimedia , 2011 - 2014
Editor Associate Editor, Journal of Advances in Multimedia , 2010 - 2017
Editor Associate Editor, Journal of Multimedia Data Engineering and Management , 2010 - Present
Chairperson, ACM Hong Kong Chapter , 2008 - 2009