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| Professional History | |
|----------------------|--|
| 2012-present | Head of Computer Vision Department, MICA Institute, Hanoi University of Science and Technology |
| 2003 - present | Researcher/lecturer of MICA Institute, Hanoi University of Science and Technology |
| 10/2016-present | Associate Professor, Hanoi University of Science and Technology |
| Education | |
| 2005-2009 | Doctorate in Computer Science from the University of Nice - Sophia Antipolis at I.N.R.I.A in the ORION project team, " <i>Video surveillance indexing and retrieval</i> ", obtained with great honor under the direction of Monique Thonnat and Alain Boucher. Defense on 3rd Feb 2009. |
| 2003-2005 | Master in Computer Science from Hanoi University of Science and Technology, Vietnam. |
| 1998-2003 | Graduate from the Hanoi University of Science and Technology, Vietnam in Information Technology |
| Teaching | Multimedia database, Thai Nguyen university, 2009-2010, ACMI program, HUST, 2017 Multimedia technology for master level, HUST from 2009-2017 Pattern recognition for master level, HUST in 2009-2010 Virtual and Augmented reality (in French), IFI, 2018, 2019 Algorithm design for University of Hung Vuong, Phu Tho, 2009-2010, C# for Genetic program, HUST, 2009-2010 Database principle, 4th year of engineer, D3i HUST 2009-2018 Database tuning for 3th year of engineer in French, ICT-INPG, 2019 Computer Vision for Samsung SDV, AI School, AI Institute, 2018-2019. |
| Publications | Doctoral Dissertation Surveillance video indexing and retrieval (in French) |
| | Master's Thesis Content-based image indexing and retrieval (in French) |
| | Book: |
| | Thi-Lan Le, Indexation et Recherche de Vidéos pour la Vidéosurveillance, Editions Universitaires Européennes (June 2010), ISBN-13: 978-6131511936 |
| | Book chapter: |
| | 1. Thi-Lan Le , Monique Thonnat and Alain Boucher, <i>Appearance-</i> based retrieval for tracked objects in surveillance videos, in Recent Developments in Video Surveillance, ISBN 978-953-307-958-5. |

- based retrieval for tracked objects in surveillance videos, in Recent Developments in Video Surveillance, ISBN 978-953-307-958-5, Eds. Asst. Prof. Dr. Hazem El-Alfy. Available from: http://www.intechopen.com/books/recent-developments-in-videosurveillance/appearance-based-retrieval-for-tracked-objects-insurveillance-videos
- Thi-Lan Le, Thanh-Hai Tran, Real-time abnormal events detection combining motion templates and object localization, in Some Current Advanced Researches on Information and Computer Science in Vietnam, Post-proceedings of The First NAFOSTED Conference on Information and Computer Science, Eds: Quang A Dang, Xuan Hoai Nguyen, Hoai Bac Le, Viet Ha Nguyen, Vo Nguyen Quoc Bao.

International journals:

- Thuy-Binh Nguyen, Thi-Lan Le*, Louis Devilliane, Thi Thanh Thuy Pham, Ngoc-Nam Pham, Effective Multi-shot Person Reidentification through Representative Frames Selection and Temporal Feature Pooling, Multimedia Tools and Applications, ISSN 1380-7501, Volume 78, Number 23, DOI 10.1007/s11042-019-08183-y, ISI, Q1.
- Hai-Phong Bui, Manh-Thang Hoang, Thi-Lan Le, Mathematical Variable Detection in Scientific Document Images, International Journal of Computational Vision and Robotics, ISSN online: 1752-914X, ISSN print: 1752-9131, Inderscience, (Scopus) (accepted).
- Hai Vu, Van-Nam Hoang, Thi-Lan Le, Thanh-Hai Tran, Thi-Thuy Nguyen, A Projective Chirp Based Stair Representation and Detection from Monocular Images and Its Application for the Visually Impaired, Pattern Recognition Letters, 2019, 13 March 2019 (ISI).
- 4. Thi Thanh Nhan Nguyen, **Thi-Lan Le***, Hai Vu, Van-Sam Hoang, Thanh-Hai Tran, Crowdsourcing for botanical data collection towards to automatic plant identification: a review, Computers and Electronics in Agriculture, Volume 155, December 2018, Pages 412-425 (**ISI**, Q1).
- Dang-Manh Truong, Huong-Giang Doan, Thanh-Hai Tran*, Hai Vu, Thi-Lan Le, Robustness analysis of 3D convolutional neural network for human hand gesture recognition, International Journal of Machine Learning and Computing (IJMLC, ISSN: 2010-3700), Vol. 9, No. 2, April 2019.
- Thi Thanh-Nhan Nguyen*, Thi-Lan Le, Hai Vu, Van-Sam Hoang, Towards an automatic plant identification system without dedicated dataset, International Journal of Machine Learning and Computing (IJMLC, ISSN: 2010-3700), Volume 9 Number 1 (Feb. 2019) (Scopus).
- Van-Hung Le, Hai Vu*, Thi Thuy Nguyen, Thi-Lan Le, Thanh-Hai Tran, GCSAC: Geometrical Constraint Sample Consensus for Primitive Shapes Estimation in 3-D Point Cloud, Journal of Computational Vision and Robotics, ISSN online: 1752-914X, ISSN print: 1752-9131, Vol.9, No.4, 7/ 2019, Inderscience, (Scopus).
- Thuy-Binh Nguyen, Thi-Lan Le*, Ngoc-Nam Pham, Fusion schemes for image-to-video person re-identification, Journal of Information and Telecommunication, Print ISSN: 2475-1839 Online ISSN: 2475-1847, 16 Oct 2018
- Thuy-Binh Nguyen, Thi-Lan Le*, Ngoc-Nam Pham, Images-to-Images Person ReID Without Temporal Linking, International Journal of Computational Vision and Robotics, ISSN online: 1752-914X, ISSN print: 1752-9131, Inderscience, (Scopus), 18 March 2019, Vol. 9, Issue 2 <u>https://doi.org/10.1504/IJCVR.2019.098798</u>.
- Hai Vu*, Van-Hung Le, Thi-Thuy Nguyen, Thi-Lan Le, Thanh-Hai Tran, Fitting Cylindrical Objects in 3-D Point Cloud using Contextual and Geometrical Constraints, Journal of Information Science and Engineering, Vol. 35 No. 1, pp. 41-60, Jan, 2019 (ISI)
- Van-Hung Le*, Hai Vu, Thi-Thuy Nguyen, Thi-Lan Le, THanh-Hai Tran, Acquiring qualified samples for RANSAC using geometrical constraints, Pattern Recognition Letters (ISI), ISSN: 0167-8655, Volume 102, 15 January 2018, Pages 58-66
- 12. Hai Vu*, Thi Lan Le, Van Giap Nguyen, Tan Hung Dinh, Semantic Regions Segmentation using a spatio-temporal model from an UAV Image Sequence with an optimal data acquisition. Journal of Information and Telecommunication, Print ISSN: 2475-1839 Online ISSN: 2475-1847, doi: 10.1080/24751839.2017.1390654, Pages 126-146, Published online: 24 Oct 2017
- Thanh-Hai Tran*, Thi-Lan Le, Van-Nam Hoang, Hai Vu, Continuous detection of human fall using multimodal features from Kinect sensors in scalable environment, Computer Methods and Programs in Biomedicine, ISSN: 0169-2607, Volume 146, July 2017, Pages 151-165, doi: <u>https://doi.org/10.1016/j.cmpb.2017.05.007</u> (ISI)
- 14. Thanh-Thuy Pham, **Thi-Lan Le***, Hai Vu, Trung-Kien Dao, Van-Toi Nguyen, Fully-automated person re-identification in multi-camera

surveillance system with a robust kernel descriptor and effective shadow removal method, Image and Vision Computing, ISSN: 0262-8856, Volume 59, March 2017, Pages 44–62, **ISI**, **Q1**.

- 15. Thi Thanh Thuy Pham*, **Thi-Lan Le** and Trung-Kien Dao, Improvement of Person Tracking Accuracy in Camera Network by Fusing WiFi and Visual Information, Vol 41, No 2, June 2017, Informatica, ISSN: 0350-5596 (Emerging SCI)
- 16. Van-Nam Hoang*, Thanh-Huong Nguyen, Thi-Lan Le, Thi-Thanh Hai Tran, Tan-Phu Vuong, Nicolas Vuillerme Obstacle detection and warning for visually impaired people based on electrode matrix and mobile Kinect, Vietnam journal of Computer Science, May 2017, Volume 4, Issue 2, pp 71–83, ISSN: 2196-8888 (print version), ISSN: 2196-8896 (electronic version).
- Huy-Hieu Pham*, Thi-Lan Le, Nicolas Vuillerme, Real-Time Obstacle Detection System in Indoor Environment for the Visually Impaired Using Microsoft Kinect Sensor, Journal of Sensors, 2016, ISSN: 1687-725X, E ISSN: 1687-7268 (ISI).
- Thi Thanh Thuy Pham*, Thi-Lan Le, Trung-Kien Dao, Person Re-Identification for Non-overlapping Cameras in Multimodal Person Localization, International Journal On Advances in Systems and Measurements, v 9 n 1&2 2016, issn: 1942-261x
- Thi-Lan Le*, Alain Boucher, Monique Thonnat, Francois Brémond, Surveillance video indexing and retrieval using object features and semantic events, International Journal of Pattern Recognition and Artificial Intelligence, Special issue on Visual Analysis and Understanding for Surveillance Applications, Vol. 23, num. 7, 2009 (ISI).

National journal:

- HOANG Manh-Hung, LE Thi Lan, HOANG Si Hong, A deep learning-based method for real-time personal protective detection, LQDTU-JICT - 2019
- Nguyen Thi Thanh Nhan, Do Thanh Binh, Nguyen Huy Hoang, Vu Hai, Tran Thi Thanh Hai, Le Thi Lan, Score-based fusion schemes for plant identification from multi-organ images, VNU Journal of Science: Computer Science and Communication Engineering, 2018
- Thanh-Nhan NGUYEN, Thi-Lan LE, Hai VU, Van-Sam HOANG, Automatic Plant Organs Detection from Images using Convolutional Neural Network (in Vietnamese), Research and Development on Information and Communication Technology (RD-ICT), ISSN 1859-3526, 2018.
- LE Van Hung, VU Hai, NGUYEN Thi Thuy, LE Thi Lan, TRAN Thi Thanh Hai, Fitting spherical objects in 3-D point cloud using the geometrical constraints. Journal of Science and Technology, Section in Information Technology and Communications, ISSN -1859 - 0209, pp.5-11, số 11, tháng 4 năm 2018
- LE Van Hung, VLAMINCK Michiel, VU Hai, NGUYEN Thi Thuy, LE Thi Lan, TRAN Thi Thanh Hai, LUONG Hiep Quang, VEELAERT Peter, WILFRIED Philips, *Real-time table plane detection using* accelerometer information and organized point cloud data from *Kinect sensor*, Journal of Computer Science and Cybernetics, Vietnam Academy of Science & Technology - 2017, Vol 32, No 3 (2016), ISSN: 1813-9663
- PHAM Thanh Thuy, DAO Trung Kien, LE Thi Lan, NGUYEN Anh Duc, Thi Tam Duong, A device-independent method for object localization based on WiFi RSSI fingerprinting, Journal of Science and Technology Technical Universities, ISSN: 2354-1083, vol. 114 - 2016, pp. 20-25.
- 7. Thi Thanh Thuy Pham, Viet Cuong Ta, **Thi Lan Le**, Trung Kien Dao, Thi Ngoc Yen Pham, *Dataset construction for multi-modal person localization and identification evaluation*, Journal of Science and Technology Technical Universities, ISSN: 0868-3980, 2015.
- 8. **Thi-Lan Le**, Thanh-Mai Nguyen, *A 2D Human Posture Recognition Method in Images and Videos*, Journal of Science and Technology Technical Universities, ISSN: 0868-3980, 2014.
- 9. PHAM Thanh Thuy, **LE Thi Lan**, DAO Trung Kien, PHAM Thi Ngoc Yen, *Acces control using face recognition*, Journal of Science and Technology Technical Universities, ISSN: 0868-3980, 2014.
- 10. Thi-Lan Le, Hai Vu, Thanh-Hai Tran, Scene classification for

advertising service based on image content, Journal of Science and Technology Technical Universities, ISSN: 0868-3980, 2013.

- Quoc- Hung Nguyen, Thi Thanh Hai Tran, Thi-Lan Le, Hai-Vu, Ngoc-Hai Pham, Quang - Hoan Nguyen, Object classification: A comparative study and applying for advertisement services based on image content, Journal of Science and Technology Technical Universities, ISSN: 0868-3980, 2013
- 12. Trung-Kien Dao, **Thi-Lan Le**, Thanh-Hai Tran, Ngoc-Thuy Le, *A Literature Review on License Plate Recognition and Vehicle Classification*, Journal on Information Technologies & Communications, No. 4(8), Volume E-1, 2011, pp. 12-26.
- 13. Huy-Viet Le, **Thi-Lan Le**, Ngoc-Thuy Le, *A vision-based method for fabric defect detection*, Journal of Science and Technology Technical Universities, ISSN: 0868-3980, No. 83B, July 2011, pp. 6-11.
- 14. **Thi-Lan Le**, *Relevance feedback methods for surveillance video retrieval*, Journal of Science and Technology Technical Universities, ISSN: 0868-3980, No. 83B, July 2011, pp. 11-16.
- Thi-Lan Le, Van-Thai Dong, Trung-Doan Pham, Vietnamese facial expression recognition for human – robot interaction, Journal of Science and Technology Technical Universities, ISSN: 0868-3980, No. 85, 2011.

International conferences:

- 1. Thi Thanh-Nhan Nguyen, **Thi-Lan Le** and Hai Vu, Do we need multiple organs for plant identification?, 3rd Int. Conference on Multimedia Analysis and Pattern Recognition (MAPR), May, 2020.
- Thuy-Binh Nguyen, Trong-Nghia Nguyen, Hong-Quan Nguyen, Thi-Lan Le and Thi Thanh Thuy Pham, How feature fusion can help to improve multi-shot person re-identification performance? 3rd Int. Conference on Multimedia Analysis and Pattern Recognition (MAPR), May, 2020
- Dinh-Tan Pham, Tien-Nam Nguyen, Thi-Lan Le and Hai Vu, Spatio-Temporal Representation for Skeleton-based Human Action Recognition, 3rd Int. Conference on Multimedia Analysis and Pattern Recognition (MAPR), May, 2020
- 4. Thi Thanh Thuy Pham, Nguyễn Đình Đức, Ba Hoang Phuc Ta, Thuy-Binh Nguyen, Ngoc-Diep Do and Thi-Lan Le, Person Search by Queried Description in Vietnamese Natural Language, 12th Asian Conference on Intelligent Information and Database Systems (ACIIDS), 2020, Thailand.
- Hai-Phong Bui, Manh-Thang Hoang, Thi-Lan Le, A unified system for mathematical expression detection in scientific document images, Korea-Vietnam International Joint Workshop on Communications and Information Sciences (KICS) 2019.
- 6. Quang-Huy Tran, **Thi-Lan Le**, Sy-Hong Hoang, A fully automated vision-based system for real-time personal protective detection and monitoring, Korea-Vietnam International Joint Workshop on Communications and Information Sciences (KICS) 2019.
- Dinh-Tan Pham, Tien-Nam Nguyen, Thi-Lan Le, Hai Vu, Analyzing Role of Joint Subset Selection in Human Action Recognition, 2019 6th NAFOSTED Conference on Information and Computer Science (NICS), December 2019, Hanoi, Vietnam.
- Huong-Giang Doan, Thanh-Hai Tran, Hai Vu, Thi-Lan Le, Van-Toi Nguyen, Sang Viet Dinh, Thi-Oanh Nguyen, Thi-Thuy Nguyen, and Duy-Cuong Nguyen, Multi-view discriminant analysis for dynamic hand gesture recognition, MAGR: Multi-Sensor for Action and Gesture Recognition, The 5th Asian Conference on Pattern Recognition (ACPR 2019), 26-29 November 2019, Auckland, New Zealand.

- Hong-Quan Nguyen, Thuy-Binh Nguyen, Thi-Lan Le, Alexis Noe, Vu Thanh Hai, Comparative evaluation of human detection and tracking approaches for online tracking applications, The International Conference on Advanced Technologies for Communications (ATC), Hanoi, Vietnam 2019.
- Minh-Thang Nguyen, Anne-Valérie Schweyer, **Thi-Lan Le**, Thanh-Hai Tran, Hai Vu, Improving ancient Cham glyph recognition from Cham inscription images using data augmentation and transfer learning, International Workshop on Pattern Recognition for Cultural Heritage (PatReCH 2019), 20th Int. Conf. on Image Analysis and Processing (ICIAP), Trento, Italy, 2019.
- 11. Bui Hai Phong, Manh-Thang Hoang and **Thi-Lan Le**, Mathematical Variable Detection based on Convolutional Neural Network and Support Vector Machine, 2nd Int. Conference on Multimedia Analysis and Pattern Recognition (MAPR), May, 2019.
- 12. Thuy-Binh Nguyen, Hong-Quan Nguyen, **Thi-Lan Le**, Thi Thanh Thuy Pham and Ngoc-Nam Pham, A Quantitative Analysis of the Effect of Human Detection and Segmentation Quality in Person Reidentification Performance, 2nd Int. Conference on Multimedia Analysis and Pattern Recognition (MAPR), May, 2019
- Van Nam Hoang, Van-Toi Nguyen, Thi-Lan Le, Hai Vu and Thanh-Hai Tran, 3D skeleton-based action recognition with convolutional neural networks, 2nd Int. Conference on Multimedia Analysis and Pattern Recognition (MAPR), May, 2019.
- 14. Minh-Thang Nguyen, Anne-Valérie Schweyer, **Thi-Lan Le**, Thanh-Hai Tran, Hai Vu, Preliminary Results on Ancient Cham Character Recognition from Cham Inscription Images, 2nd Int. Conference on Multimedia Analysis and Pattern Recognition (MAPR), May, 2019
- 15. Bui Phong, Thang Hoang Manh, Lan Le Thi and Akiko Aizawa, Mathematical Variable Detection in PDF Scientific Documents, ACIIDS 2019, 8-11 April 2019, Yogyakarta, Indonesia.
- Dinh-Ha Nguyen, Trung-Hieu Le, Thi-Thanh-Hai Tran, Hai Vu, Thi-Lan Le and Huong-Giang Doan, Hand segmentation under different viewpoints by combination of Mask R-CNN with tracking, The 5th Asian Conference on Defense Technology (ACDT 2018), Oct 2018.
- 17. Thuy-Binh Nguyen, Duc-Long Tran, **Thi-Lan Le**, Thi Thanh Thuy Pham, Huong-Giang Doan, An effective implementation of Gaussian of Gaussian descriptor for person re-identification, The 5th NAFOSTED Conference on Information and Computer Science (NICS), November 23-24, 2019.
- Tien-Nam Nguyen, Dinh-Tan Pham, Thi-Lan Le, Hai Vu, Thai-Hai Tran, Novel Skeleton-based Action Recognition Using Covariance Descriptors on Most Informative Joints, 10th International Conference on Knowledge and Systems Engineering (KSE 2018) -November 2018, HCM, Vietnam.
- Thanh-Hai Tran, Thi-Lan Le, Dinh-Tan Pham, Van-Nam Hoang, Van-Minh Khong, Quoc-Toan Tran, Thai-Son Nguyen, Van-Cuong Pham, A multi-modal multi-view dataset for human fall analysis and preliminary investigation on modality, 24th International Conference on Pattern Recognition (ICPR), Beijing, China
- 20. NGUYEN Thi Thuy, HOANG Van Nam, LE Thi Lan, TRAN Thi Thanh Hai, VU Hai, A vision based method for automatic evaluation of rice seed germination rate, 1st International Conference on Multimedia Analysis and Pattern Recognition (MAPR), HCM, Vietnam, April 2018 (best paper award)

- 21. NGUYEN Hong Quan, NGUYEN Thuy-Binh, **LE Thi Lan**, Enhancing Person Re-identification based on Recurrent Feature Aggregation Network, 1st International Conference on Multimedia Analysis and Pattern Recognition (MAPR), HCM, Vietnam, April 2018
- 22. NGUYEN Thuy-Binh, **LE Thi Lan**, NGUYEN Dinh-Duc, PHAM Dinh-Tan, A reliable image-to-video person re-identification based on feature fusion, 10th Asian Conference on Intelligent Information and Database Systems (ACIIDS), Springer march 2018
- Thanh Binh Do, Huy Hoang Nguyen, Thi Thanh Nhan Nguyen, Hai Vu, Thi Thanh Hai Tran and **Thi Lan Le,** Plant Identification using combinations of multi-organ images, CVPR special session, KSE 2017, ISBN 978-1-5386-3576-6, October 2017, Hue.
- 24. Thi Thanh-Nhan Nguyen, **Thi-Lan Le**, Hai Vu, Huy-Hoang Nguyen and Van-Sam Hoang, A Combination of Deep Learning and Hand-Designed Feature for Plant Identification based on Leaf and Flower Images, 9th Asian Conference on Intelligent Information and Database Systems, 3-5 April 2017, Kanazawa, Japan.
- 25. Thanh-Thuy Pham, **Thi-Lan Le**, Trung-Kien Dao, Fusion of WiFi and visual signals for person tracking, 7th International Symposium on Information and Communication Technology (SoICT 2016), HoChiMinh, Vietnam - December 2016, ISBN: 978-1-4503-4815-7.
- 26. VU Hai, TACHTATZIS Christos, MURRAY Paul, HARLE David, DAO Trung Kien, **LE Thi Lan**, ANDONOVIC Ivan, MARSHALL Stephen, Rice seed varietal purity inspection using hyperspectral imaging, The fifth Hyperspectral Imaging and Applications Conference (HSI 2016), Conventry, UK - October 2016.
- 27. Hai Vu, Christos Tachtatzis, Paul Murray, David Harle, Kien Dao Trung, Lan Le Thi, Ivan Andonovic and Stephen Marshall, Spatial and Spectral Features Utilization on a HyperSpectral Imaging System for Rice Seed Varietal Purity Inspection, IEEE RIVF International Conference on Computing and Communication Technologies, Hanoi, 2016.
- Van-Toi Nguyen, Thi-Lan Le, Thanh-Hai Tran, An evaluation of Hand Pyramid structure for Hand Representation based on Kernels, International Conference on Advances in Information and Communication Technology (ICTA 2016), ThaiNguyen, Vietnam, 2016, DOI 10.1007/978-3-319-49073-1_15, Print ISBN 978-3-319-49072-4, Online ISBN 978-3-319-49073-1.
- 29. Thi Thanh Nhan Nguyen, Van Tuan Le, **Thi Lan Le**, Hai Vu, Natapon Pantuwong, Yasushi Yagi, Flower species identification Using Deep Convolutional Neural Networks, Regional Conference on Computer and Information Engineering (RCCIE), Myamar, Oct 2016.
- 30. Nicolas Des Aunais, Trung-Kien Dao, Dinh-Van Nguyen, Thanh-Thuy Pham, Castelli Eric, **Thi-Lan Le** and Ngoc-Yen Pham, Analytical Method for Multimodal Localization Combination using Wi-Fi and Camera 14th International Conference on Control, Automation, Robotics & Vision (ICARCV), 2016, Phuket, Thailand.
- Trung-Kien Dao, Thanh-Hai Tran, **Thi-Lan Le**, Hai Vu, Viet-Tung Nguyen, Dang-Khoa Mac, Ngoc-Diep Do and Thanh-Thuy Pham, Indoor Navigation Assistance System for Visually Impaired People using Multimodal Technologies, 14th International Conference on Control, Automation, Robotics & Vision (ICARCV), 2016, Phuket, Thailand.
- 32. Thuy Binh Nguyen, Van Phu Pham, Thi-Lan Le and Cuong Vo Le,

An improved saliency-based person re-identification, the 2nd International Workshop on Pattern Recognition for Multimedia Content Analysis (PR4MCA 2016) In conjunction with the 8th International Conference on Knowledge and System Engineering - 2016, ISBN 978-1-4673-8929-7.

- 33. Van-Hung Le, Thi-Lan Le, Hai Vu, Thuy Thi Nguyen, Thanh-Hai Tran, Tran-Chung Dao, Hong-Quan Nguyen, Geometry-based 3-D Object Fitting and Localization in Grasping Aid for Visually Impaired People, International Conference on Communications and Electronics (ICCE), Halong, 2016, ISBN 978-1-5090-1800-0.
- 34. Thanh-Hai Tran, **Thi-Lan Le**, Vision based boat detection for maritime surveillance, The 15th international Conference on Electronics, Information, and Communication (ICEIC 2016), 2016.
- 35. Hai Vu, Thi Lan Le, Van Giap Nguyen, and Tan Hung Dinh, Selections of Suitable UAV Imagery's Configurations for Regions Classification, 8th Asian Conference on Intelligent Information and Database Systems, 14-16 March 2016, Volume 9621 of the series Lecture Notes in Computer Science pp 801-810, DOI 10.1007/978-3-662-49381-6_77, Print ISBN 978-3-662-49380-9, Online ISBN 978-3-662-49381-6.
- 36. Nam-Duong Duong, **Thi-Lan Le**, Hai Vu, A Web-based Plant Identification Application Using Multi-Organ Images Query, Regional Conference on Computer and Information Engineering (RCCIE), Hanoi, VietNam, Oct 2015.
- 37. LE Van Hung, NGUYEN Thi Thuy, VU Hai, LE Thi Lan, TRAN Thi Thanh Hai, VLAMINCK Michiel, WILFRIED Philips, VEELAERT Peter, Query-based 3D Object Finding Using Geometrical Constraints on Depth Images for Assisting the Visually Impaired, The 1st International Workshop on Pattern Recognition for Multimedia Content Analysis (PR4MCA 2015) In conjunction with the 7th International Conference on Knowledge and System Engineering - 2015
- 38. PHAN Thi Thu Hong, TRAN Thi Thanh Hai, LE Thi Lan, VO Ta-Hoang, NGUYEN Thi Thuy, Comparative study on vision based rice seed varieties identification, The 1st International Workshop on Pattern Recognition for Multimedia Content Analysis (PR4MCA 2015) In conjunction with the 7th International Conference on Knowledge and System Engineering - 2015
- 39. **Thi-Lan Le**, Nam-Duong Duong, Hai Vu, Thanh-Nhan Nguyen, *MICA at LifeCLEF 2015: Multi-organ Plant Identification*, CLEF 2015 Working Notes proceedings, 2015.
- 40. NGUYEN Van Toi, TRAN Thi Thanh Hai, LE Thi Lan, MULLOT Remy, COURBOULAY Vincent, Using hand postures for interacting with assistant robot in library, The 1st International Workshop on Pattern Recognition for Multimedia Content Analysis (PR4MCA 2015) In conjunction with the 7th International Conference on Knowledge and System Engineering, Ho Chi Minh City, Vietnam -2015, Best paper award of the workshop.
- Trung-Kien Dao, Thi-Lan Le, David Harle, Paul Murray, Christos Tachtatzis, Stephen Marshall, Craig Michie, Ivan Andonovic, *Automatic Cattle Location Tracking using Image Processing*, The 23rd European Signal Processing Conference (EUSIPCO 2015), Nice, France, 31st Aug-4th Sept 2015.
- 42. Thi Thanh Thuy Pham, Thi-Lan Le, Trung-Kien Dao, Van-Toi Nguyen, and Duy-Hung Le, A robust model for person reidentification in multi-modal person localization, The Ninth International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies, UBICOMM 2015, July 19 -

24, 2015 - Nice, France.

- 43. Thi-Lan Le, Nam-Duong Duong, Hai Vu, Van-Toi Nguyen, Van-Nam Hoang, Thi Thanh Nhan Nguyen, Complex Background Leafbased Plant Identification Method Based on Interactive Segmentation and Kernel Descriptor, The 2nd International Workshop on Environmental Multimedia Retrieval (EMR 2015) - in conjunction with ICMR 2015, Shanghai, China; 06/2015.
- 44. Van-Toi Nguyen, **Thi-Lan Le**, Thanh-Hai Tran, Remy Mullot, Vincent Courboulay, *A New Hand Representation Based on Kernels for Hand Posture Recognition*, The Eleventh IEEE International Conference on Automatic Face and Gesture Recognition (FG 2015), Slovenia, 2015.
- 45. **Thi-Lan Le**, Duc-Tuan Tran, Van-Nam Hoang, *Fully automatic leafbased plant identification*, application for Vietnamese medicinal plant search, SoICT, HaNoi, Vietnam, 2014.
- Van-Toi Nguyen, Thi-Lan Le, Thanh-Hai Tran, Remy Mullot, Vincent Courboulay, Hand postures recognition using Kernel Descriptor, The 6th Intelligent Human Computer Interaction (IHCI), Paris, France, 8-10 Dec 2014.
- 47. **Thi-Lan Le**, Hai Vu, Thanh-Hai Tran, Van-Nam Hoang, Multimodal Vietnamese medicinal plants retrieval system for Android, Regional Conference on Computer and Information Engineering (RCCIE), Yogyakarta, Indonesia, 7-8 Oct, 2014.
- 48. Thanh Hai Tran, Ta Hoang Vo, Duc-Tuan Tran, **Thi-Lan Le**, Thi Thuy Nguyen, Dynamic hand gesture recognition using RGB-D motion history and kernel descriptor, The International Conference on Advanced Technologies for Communications 2014 (ATC'14), October 2014.
- 49. Stéphane Lathuilière, Hai Vu, **Thi-Lan Le**, Thanh-Hai Tran and Hung Dinh Tan, Semantic Regions Recognition in UAV Images Sequence, The sixth international conference on Knowledge and System engineering (KSE), Hanoi, Vietnam, October 2014.
- 50. **Thi-Lan Le**, Duc-Tuan Tran, Ngoc-Hai Pham, Kernel descriptor based plant leaf identification, 4th International Conference on Image Processing Theory, Tools and Applications, 14-17 October 2014, Paris, France.
- 51. TRAN Do Dat, **LE Thi Lan**, TRAN Thi Thanh Hai, Abnormal event detection using multimedia information for monitoring system, The fifth IEEE International Conference on Communications and Electronics (ICCE), 31th July-1st Aug, 2014.
- 52. TRAN Thi Thanh Hai, **LE Thi Lan**, MOREL Jérémy, An analysis on human fall detection using skeleton from Microsoft Kinect, The fifth IEEE International Conference on Communications and Electronics (ICCE), 31th July-1st Aug, 2014
- 53. Thi-Lan Le, Ngoc-Hai Pham, MICA at ImageClef 2013 Plant Identification task, The fourth CLEF (Conference and Labs of the Evaluation Forum) conference, Information Access Evaluation meets Multilinguality, Multimodality and Visualization, 23-26 September 2013, Valencia, Spain.
- 54. Thanh-Huong Nguyen, Thi Hue Nguyen, Thi-Lan Le, Thi-Thanh-Hai Tran, Nicolas Vuillerme, Tan-Phu Vuong, A Wearable Assistive Device for the Blind Using Tongue-Placed Electrotactile Display: Design and Verification, The Second International Conference on Control, Automation and Information Sciences (ICCAIS 2013), Nha Trang, Viet Nam - November 2013

- 55. Thanh-Huong Nguyen, Thi Hue Nguyen, **Thi-Lan Le**, Thi-Thanh-Hai Tran, Nicolas Vuillerme, Tan-Phu Vuong, A Wireless Assistive Device for Visually-impaired Persons using Tongue Electrotactile System, International Conference on Advanced Technologies for Communications - ATC 2013 - October 2013, Ho Chi Minh city, VietNam.
- 56. Quang-Khue Nguyen, Thi-Lan Le, Ngoc-Hai Pham, Leaf based plant identification system for Android using SURF features in combination with Bag of Words model and supervised learning, International Conference on Advanced Technologies for Communications (ATC) - October 2013, Ho Chi Minh city, VietNam.
- 57. Hai Vu, Thi-Thuy Nguyen, **Thi-Lan Le**, Thi-Thanh-Hai Tran, A vision based method for automatizing tea shoots detection, International Conference on Image Processing (ICIP), September 2013 Australia.
- 58. Thanh-Huong Nguyen, Thi-Lan Le, Thi-Thanh-Hai Tran, NicolasVuillerme, Tan-Phu Vuong, Antenna Design for Tongue Electrotactile Assistive Device for the Blind and Visually-Impaired, 7th European Conference on Antennas and Propagation EuCAP 2013, 08th - 12th April 2013 in Gothenburg, Sweden
- 59. Quoc-Hung Nguyen, Thi Thanh- Hai Tran, **Thi-Lan Le**, Quang-Hoan Nguyen, Object detection and classification for advertising service based on image content, 7th SEATUC (South East Asian Technical University Consortium) Symposium, 5-6 March 2013, Indonesia.
- Van-Ngoc Nguyen, Thi-Thanh-Hai Tran, Thi-Lan Le, Van-Toi Nguyen, Thi-Thuy Nguyen, Temporal gesture segmentation for recognition, The International Conference on Computing, Management and Telecommunications (ComManTel 2013), 21-24 January 2013, Ho Chi Minh city, VietNam.
- 61. **Thi-Lan Le**, Minh-Quoc Nguyen, Thanh-Mai Nguyen, Human posture recognition using human skeleton provided by Kinect, The International Conference on Computing, Management and Telecommunications (ComManTel 2013), 21-24 January 2013, Ho Chi Minh city, VietNam.
- 62. Ngoc-Hai Pham, **Thi-Lan Le**, Pierre Grard, Van-Ngoc Nguyen, Computer aided plant identification system, The International Conference on Computing, Management and Telecommunications (ComManTel 2013), 21-24 January 2013, Ho Chi Minh city, VietNam.
- 63. Van-Toi Nguyen, **Thi-Lan Le**, Thanh-Hai Tran, Remy Mullot, Vincent Courboulay, A method for hand detection based on Internal Haar-like features and Cascaded AdaBoost Classifier, The Fourth International Conference on Communications and Electronics (ICCE'12), Hue, 1-3 August 2012.
- 64. **Thi-Lan Le**, Relevance feedback for surveillance video retrieval at object level, The 2nd FTRA International Workshop on Multimedia and Semantic Technologies (MUST), 2011, Greece.
- 65. **Thi-Lan Le**, Van-Thai Dong, Toward a Vietnamese facial expression recognition system for human-robot interaction, ATC conference, Da Nang, 2-4 August, 2011.
- 66. **Thi-Lan Le**, Alain Boucher, Monique Thonnat, Francois Brémond, Surveillance video retrieval: what we have already done?, The third international conference ICCE, VietNam, August 2010.
- 67. **Thi-Lan Le**, Monique Thonnat, Alain Boucher, Francois Brémond, Appearance based retrieval for tracked objects in surveillance videos, ACM International Conference on Image and Video

Retrieval (CIVR), July 8-10, 2009, Santorini, Greece.

- Thi-Lan Le, Alain Boucher, Monique Thonnat, Francois Brémond, A framework for surveillance video indexing and retrieval, The 6th International Workshop on Content Based Multimedia Indexing (CBMI'08), London, UK, June 9-12 2008.
- 69. **Thi-Lan Le**, Monique Thonnat, Alain Boucher, Francois Brémond, A Query Language Combining Object Features and Semantic Events The 14th International MultiMedia Modeling Conference (MMM' 2008), Kyoto, January 2008.
- Thi-Lan Le, Alain Boucher, Monique Thonnat, Subtrajectory-Based Video Indexing and Retrieval, Proceeding of 13th International MultiMedia Modeling Conference (MMM 2007), January, 2007, 418-427.
- 71. **Thi-Lan Le**, Alain Boucher, Monique Thonnat, Trajectory-Based Video Indexing and Retrieval Enabling Relevance Feedback, First International Conference on Communications and Electronics (ICCE'06), Hanoi, Vietnam, October 2006.
- 72. **Thi-Lan Le,** Alain Boucher, An interactive image retrieval system: from symbolic to semantic, International Conference on Electronics, Information, and Communications (ICEIC), 16-18 August, 2004, Hanoi (Vietnam).
- 73. Alain Boucher, **Thi-Lan Le**, Comment extraire la sémantique d'une image ? International Conference on Sciences of Electronic, Technologies of Information and Telecommunications (SETIT), mars 2005, Susa (Tunisie).
- 74. Alain Boucher, Thanh-Ha Dang, **Thi-Lan Le**, Classification vs recherche d'information : vers une caractérisation des bases d'images, 12èmes Rencontres de la Société Francophone de Classification (SFC), mai/juin 2005, Montréal (Canada)

National conferences :

- 1. Hai-Phong Bui, Manh-Thang Hoang, **Thi-Lan Le**, A New method for Displayed Mathematical Expression Detection Based on FFT and SVM, The 4th NAFOSTED Conference on Information and Computer Science, Hanoi, Vietnam, ISBN: 978-1-5386-3210-9, 11/2017.
- LE Van Hung, VU Hai, NGUYEN Thi Thuy, LE Thi Lan, TRAN Thi Thanh Hai, Table plane detection using Geometrical constraints on depth images, The 8th Vietnamese Conference FAIR -Fundamental and Applied IT Research, Hanoi, VietNam, 2015.
- 3. HOANG Van-Nam, NGUYEN Thanh Huong, **LE Thi Lan**, TRAN Thi Thanh Hai, VUONG Tan Phu, VUILLERME Nicolas, Obstacle detection and warning for visually impaired people based on electrode matrix and mobile Kinect, The second NAFOSTED Conference on Information and Computer Science (NICS) - 2015
- 4. **Thi-Lan Le**, Van-Nam Hoang, Hai Vu, Thanh-Hai Tran, Vietnamese medicinal plants retrieval system for Android, The 17th national conference: selected problems about IT and Telecommunication, Tay Nguyen, 2014.
- Nguyen Van Toi, Vu Hai, Tran Thi Thanh Hai, Le Thi Lan, Noise suppression in depth map for improved background segmentation, The 7th Vietnamese Conference FAIR - Fundamental and Applied IT Research, Thai Nguyen, VietNam, 2014.
- Phạm Thị Thanh Thủy, Lê Thị Lan, Đào Trung Kiên, Phạm Thị Ngọc Yến, Visual-based indoor mobile object detection and tracking and localization, 2014 National Conference on Electronics, Communications and Information Technology – REV-ECIT2014, Nha Trang, VietNam, 18-19 Sept 2014.
- 7. **Thi-Lan Le**, Thanh-Hai Tran, Abnormal events detection combining motion templates and object localization, The first NAFOSTED Conference on Information and Computer Science 2014 (NICS'14), Hanoi, Vietnam, 13-14 March 2014.
- Thanh-Thuy Pham, Trung-Kien Dao, Thi-Lan Le, Ngoc-Yen Pham, Hung-Long Nguyen, Toward to a hybrid mobile object localization method based on WiFi and image, The 6th Vietnamese Conference FAIR - Fundamental and Applied IT Research, Hue, VietNam, 20-21 June 2013.

- Trung-Kien Dao, Thi-Lan Le, A mail delivery robot based on room number plate recognition, The 6th Vietnam Conference on Mechatronics (VCM), 14-15 December 2012, Hanoi VietNam.
- 10. Quoc-Cuong Nguyen, **Thi-Lan Le**, Viet-Tung Nguyen, Do-Dat Tran, Interactive Museum Tour-Guide Robot based on Multimedia Technology, Vietnam conference on Control and Automation (VCCA), November 2011.
- 11. Huy-Viet Le, Thanh-Hai Tran, **Thi-Lan Le**, Automatic fabric inspection system based on image processing and pattern recognition techniques, Vietnam conference on Control and Automation (VCCA), November 2011.
- 12. **Thi-Lan Le**, Monique Thonnat, Alain Boucher, Francois Bremond, Feature extraction for object retrieval in videosurveillance systems, Vietnam Conference on Measurement, Hanoi, VietNam, 2010.
- Thi-Lan Le, Monique Thonnat, Alain Boucher, Francois Bremond, Feature extraction for object retrieval in videosurveillance systems, 12th Vietnam conference in Information Communication and Technology (ICT), Đồng Nai, Việt Nam, 2009.
- Thi-Lan Le, Alain Boucher, Monique Thonnat, An Interface for image retrieval and its extension to video retrieval, Proceedings of the Third National Symposium on Research, Development and Application of Information and Communication Technology (ICT.rda'06), Hanoi, Vietnam, May 2006, 278-285.
- 15. **Thi-Lan Le**, Interface de Visualisation avec le Retour de pertinence pour la recherche d'Images, 1ere Rencontres des Jeunes Chercheurs en Recherche d'Information (RJCRI06), 15-17 mars, 2006, Lyon.

Invited talks :

- 1. Thi-Lan Le, "Person re-identification in camera network: current achievements and future directions", 2019 KICS Korea-Vietnam International Joint Workshop on Communications and Information Sciences November 20-22, 2019, Hanoi, Vietnam
- 2. Thi-Lan Le, "Application of technology in education", Vietnam National University of Agriculture.
- Thi-Lan Le, "An approach for plant identification from images and its application for Vietnamese medicinal plant retrieval", 12/2018, Application of Information Technology in Forestry, National Forestry University.
- 4. Thi-Lan Le, "Continuous detection of human fall using multimodal features from Kinect sensors in scalable environment", AURA workshop, Tokyo, Oct 2017.
- Thi-Lan Le, "Information retrieval service for biodiversity: application to Vietnamese medicinal plant identification", Workshop on ICT Research and Innovation for Sustainable Economic and Social Development in ASEAN (ASEAN RISE2016) - May 2016
- 6. Thi-Lan Le, "*Computer vision group*", Meeting of young research groups in HUST, 2016.
- 7. Thi-Lan Le, "Feature extraction for object recognition", KDE lab, 2016

Supervision of Research Activities

Supervisor/co-supervisor for ongoing PhDs

- 1. Duc-Tan Pham, 2018-2021, *Representation learning for human activity recognition* Co-supervision with Dr. Hai Vu (MICA, HUST), 2018-2021.
- 2. Hai-Phong Bui, 2017-2020, *Mathematical Expression Recognition*, Co-supervision with Assoc. Prof. Manh-Thang Hoang (SET, HUST).
- 3. Thi Thanh Nhan Nguyen, 2015-2019, Interactive and multi-organ based plant species identification, Co-supervision with Van-Sam Hoang (Vietnam Forestry University), first defense on 30 Jul 2019.
- 4. Thuy-Binh Nguyen, 2015-2019, *Person re-identification in a camera network*, with Prof. Ngoc Nam Pham (SET, HUST).
- Thanh-Thuy Pham, 2012-2015, Multimodal object localization and identification, with Trung-Kien Dao (MICA), first defense on 26th Aug 2016, final defense on 23th March 2017.

- Thanh Huong-Nguyen from October 2010 till April 2014. Contribution à l'étude d'un système miniature à faible consommation pour l'assistance aux personnes Aveugles. Cosupervision with Prof Tan-Phu Vuong (IMEP-LAHC, Grenoble) and Thanh-Hai Tran (MICA), Nicolas Vuillerme (AGIM, France), defended on 14th November 2014.
- Van-Toi Nguyen from October 2010 till October 2013. Hand gesture interpretation for human-robot interaction. Co-supervision with Remy Mullot (L3i, Universite de La Rochelle), Vincent Courboulay(L3i, Universite de La Rochelle), Thanh-Hai Tran (MICA), defended on 15th December 2015.

Supervisor/co-supervisor for Master student

- 1. Tien-Nam Nguyen, *Skeleton-based Action Recognition*, **Defended** on 26th Oct 2019.
- 2. Duc-Long Tran, Fully automated *person re-identification system*, 2019
- 3. Van-Long Nguyen, *Human posture recognition from multiple Kinects*, PFIEV, 2016. **Defended on 31th Oct 2016**.
- 4. Van-Nam Hoang, *Difficult situations recognition for visual-impaired aid using mobile Kinect*, 2014-2016. **Defended on 25th Feb 2016**.
- 5. Thanh-Mai Nguyen from December 2011 till January 2013, *Human posture recognition in videos*, Master of Science in Information Technology, SoICT, HUST. **Defended 1/2014**
- Van-Thai Dong from March 2012 to October 2013 Object detection and application to advertising service based on image content. Defended 10/2013

Supervisor/co-supervisor for engineer student

- 1. Doan-Khang Nguyen, Unsupervised person re-identification, SEE PFIEV K60, HUST, 1/2020-6/2020
- Minh-Thang Nguyen, Document analysis, SEE K60, HUST, 1/2020-6/2020
- 3. Tan-Dat Luong, Mathematical expression recognition, SEE K60, HUST, 1/2020-6/2020
- 4. Quang-Huy Tran, Human activity recognition using accelerometer information, SEE K60, HUST, 7/2019-12/2019
- 5. Thu-Hien Le, Human activity recognition, SEE, HUST, 8/2019-
- 6. Cao-Cuong Than, Skeleton-based human activity recognition, SEE K60, HUST, 2/2019-12/2019
- Quang-Huy Tran, Co-supervision with Assoc. Prof. Si-Hong Hoang, Vision-based Personal Protective Equipment Monitoring, SEE K60, HUST, 2/2019-12/2019 1 int conf paper
- 8. Minh-Duc Trieu, Co-supervision with Assoc. Prof. Dinh-Khang Tran, Pedestrian crossing road detection, AS K59
- 9. Dinh-Duc Nguyen, Co-supervision with Dr. Ha-Bang Ban Person search using natural language, AS K59
- 10. Van-Hoang Pham, Co-supervision with Dr. Thanh-Chung Dao, Activity segmentation and recognition, AS K59
- 11. Van-Tien Pham, Co-supervision with Assoc. Prof. Thanh-Hai Tran, Multimodal hand detection, PFIEV K59
- 12. Alexis NOE, Vision-based person re-identification, 5/2019-8/2019
- OUEDRAOGO Inoussa, Amélioration des méthodes d'identification des plantes à partir d'images basées sur le Réseau de neurones convolutionnel IFI, Promo 23, 12/2018-6/2019
- 14. Minh-Thang Nguyen, Ancient Cham Glyph Recognition from Cham Inscription images, SEE, HUST, 1/2018-6/2020
- 15. Manh-Hung Hoang, Co-supervision with Assoc. Prof. Si-Hong Hoang Vision-based Personal Protective Equipment Monitoring SEE, HUST, 1/2018-1/2019
- 16. Duy-Thinh Le, *Plant growth monitoring from multiple views*, SEE, HUST, 2018.
- 17. DEVILLAINE Louis, *Effect of Pooling in Person Re-Identification Algorithms*, Grenoble, France
- 18. Matchoro Yoann, *Human skeleton estimation from multiple Kinects*, Bordeaux, France
- 19. Tien-Nam Nguyen, Skeleton-based Action Recognition Using Covariance Descriptors on Most Informative Joints, PFIEV K58, HUST, 2018.
- 20. Duc-Long Tran, GOG extraction for person re-identification, PFIEV

K58, HUST, 2018.

- 21. Dinh-Duc Nguyen, Person re-identification, SET, K58, 2017-2018.
- 22. Tung-Duong Pham, *Color-based staircase detection*, SEE, K57, HUST, 2016-2017
- 23. Huy-Hieu Pham, Obstacle detection and warning for visually impaired people based on electrode matrix and mobile Kinect, PFIEV K55.
- 24. Duong Nam Duong, *Multi-organ plant identification*, PFIEV K55, HUST, 2015.
- 25. Phung Thi Thoa, *Feature extraction for multi-organ plant identification*, Thai Nguyen University, 2015.
- 26. Le Duy Hung, Developing vision module for multimodal object localization system, 2015.
- 27. Duc-Tuan, Tran, *Plant identification based on kernel descriptor,* Final year internship, PFIEV K54, HUST, 2014.
- 28. Jeremy Morel, *Human activity recognition with Kinect device,* internship for second year, ENSEIRB-Matmeca, Talence, Bordeaux, 22 March 2013-13 September 2013.
- 29. Ngoc-Anh Lai, *Plant identification system for Android*, 2013, Final year internship, SoICT, HUST.
- 30. Quang-Khue Nguyen, *Plant identification system*, 2013, Final year internship, Honor program of Hanoi University.
- 31. Minh-Quoc Nguyen, *Human posture recognition using Kinect*, master internship, USTH, 2012.
- 32. Johnny Saygnachith, *Visual impairment aid based on Kinect*, 2012, internship for second year, Grenoble INP Phelma.
- 33. Hong-Duong Dinh, *Object tracking based on particle filter*, 12/2011, Information Technology Faculty, Thai Nguyen University
- 34. Broche Ludovic, *3D localization*, internship for second year, Grenoble INP Phelma.
- 35. Chaleon Fanny, *Abnormal activity recognition based on human posture classification*, internship for second year, Grenoble INP Phelma.
- 36. Boutboul Dustin, *Multiple Target Tracking and Identity Management*, internship for second year, Grenoble INP Phelma.
- 37. Picard Guillaume, *Object detection*, internship for second year, Grenoble INP Phelma.
- 38. Van-Long Nguyen, *Character detection and recognition*, 2011, Final year internship, PFIEV program, HUST.
- 39. Van-Duc Dam, *Vehicle plate detection and recognition*, 2010, Final year internship, School of Electronics and Telecommunications, HUST.
- 40. Van-Tam Tran, *Facial expression recognition*, 2010, Final year internship, PFIEV, HUST.
- 41. Tran-Chung Dao, *Image indexing and retrieval*, 2010, Final year internship, Information Technology Faculty, Thai Nguyen University.
- 42. Van-Thai Dong, *Hand gesture recognition*, 2010, Final year internship, Information Technology Faculty, Thai Nguyen University.
- 43. Trung-Doan Pham, *Face detection*, 2010, Final year internship, PFIEV, HUST.

Running projects are:

- Nafosted project "Understanding Human Daily Life Activities from Egocentric Vision Using Advanced Technologies of Deep Learning", 2018-2021 (36 months), funded by Nafosted - project key member
- Nafosted project "Improving human action recognition using manifold representation and deep learning from multimodal data ", 2017-2019 (24 months), funded by Nafosted - project key member

Participation in the following finished projects:

- AFOS, US project "Robust dynamic hand gestures recognition for human machine interaction using multimodal features and manifold learning", 2017-2019 (24 months), funded by AFOS, US - project key member
- 2. CUI research program "Evaluation of rice seed viability and rice

Collaboration and research projects

plant growth using Image-based Phenotype Analysis", 2017-2018

- 3. HUST project "Improving multi-shot person re-identification in camera network", 11/2017-11/2018, T2017-PC-123, Promoter.
- 4. AUN/SEED-Net project "Medicinal Plant Identification and Collaborative Information System", funded by AUN/SEED-Net, 2015-2017.
- Nafosted-FWO project "Geometric scene analysis as a navigational aid to the visually impaired", funded by Nafosted, 6/2014-6/2016, grant number: FWO.102.2013.08, project promoter.
- 6. Nafosted project "Development of multimodal localization methods in indoor perceptive environments", 2014-2016.
- 7. CUI research program "Rice seed assessment using advanced image processing techniques and machine vision tool", 2014-2015.
- 8. VLIR project "Visually impaired people assistance using multimodal technologies", 7/2012-7/2015, project copromoter
- 9. National project **"Abnormal detection with Kinect device**", 2013-2014 (24 months), funded by Ministry of Education and Training
- 10. National project "**Multimodal object localization**" 2013-2014 (24 months), funded by Ministry of Education and Training
- Nafosted project "Some Advanced Statistical Learning Techniques for Computer Vision", No 102.01-2011.17, 2011-2012 (24 months) with Hanoi University of Agriculture, Hanoi University
- 12. National project "Research and development of advertising services based on image content in photo sharing systems", funded by Ministry of Science and Technology, 1/2012-12/2012 (12 months). The main objective of this project is to provide advertising service in photo sharing systems based on image content analysis techniques.
- 13. **BQR project LORELA ("Lo**calisation **Rel**ative personnes/objets en environnements perceptifs pour l'assistances aux personnes **A**veugles"), 2010-2013. The main partners are IMEP-LAHC (Grenoble), TIMC (Grenoble), MICA. The objective of this project is to develop navigation assistant tool for blind people. This project has three main research activities that are video analysis, information representation and wireless information communication technologies. **Project promoter at Vietnam side**.
- 14. **CUI research program "Automatizing tea flush assessment by advanced machine vision technique"**, with Hanoi University of Agriculture and NOMAFSI, 2011-2012 (24 months). In this project, we will develop a system based on advanced computer vision techniques to assess tea flush in order to determine its maturing time for harvesting. The system will assist the preparation for harvesting and factory management.
- 15. National project "Object detection and recognition in perceptive environments", 2011-2012 (24 months), funded by Ministry of Education and Training. This project focuses on object detection and recognition in small size perceptive environments. A general object detection and recognition module will be proposed. This module will be validated with two object types (face and office door plate) in two applications (surveillance and service robot). *Project promoter*.
- 16. **ISERE** "Inter-media" Semantic Extraction & REasonning" Project of ASIA-ITC Programme, with IPAL, NUS, I2R Singapour, CLIPS, IRIT, INRIA France, NII Japon, NTU, NCKU, Taiwan.
- 17. **IRIS "Indexing and Recognition of Images by Semantics"**, Project of AUF PCSIU, with ORION Project (INRIA Sophia Antipolis) and Montéfiore University (Belgium).
- 18. **IPTV** between Orange/France Telecom and MICA, HUST.
- 19. National project "**SmartRobot**", 07/2009-07-2011 (24 months) funded by VietNam Ministry of Science and Technology. Our objective is to study, design and develop smart robots that operate in large-scale daily environment such as museums, tourist attractions to support people through interactions with human emotions, body movements and speech.

20. National project "**SIATT- Automated fabric defect detection system**", 1/2010-12/2011 (24 months) funded by Hanoi department of Science and Technology. The partner of this project is Norfolk Hatexco Company. This project consists of three main parts: defect detection, defect classification and defect localization. For defect classification, our system has to be able to classify five common types of defect.

Scientific responsibilities

Board Member

1. Editorial Board Member of IET Computer Vision since 2017

Program committee member of the conferences and workshops

2020

- 2020 Special Session on Computer Vision and Intelligent systems at the 12 th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2020)
- 2. IEEE International Conference on Multimedia and Expo (ICME), UK
- 3. THE 2020 RIVE INTERNATIONAL CONFERENCE ON COMPUTING AND COMMUNICATION TECHNOLOGIES (RIVE)

2019

- 4. The Tenth International Symposium on Information and Communication Technology (SoICT 2019)
- 5. KICS 2019
- 6. The 2019 6th NAFOSTED Conference on Information and Computer Science (NICS'19)
- 7. The 11th International Conference on Knowledge and Systems Engineering (KSE 2019)
- 8. The International Conference on Advanced Technologies for Communications (ATC), 2019, Hanoi, Viet Nam.
- 9. The second International Conference on Multimedia Analysis and Pattern Recognition (MAPR), May 2019, HCM city, Vietnam
- **10.** the 20th International Conference on Image Analysis and Processing (ICIAP 2019), 9-13 September, 2019, Trento, Italy.
- **11.** Co-organizer of CVIS 2019 Special Session on Computer Vision and Intelligent systems at the 11 th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2019)

2018

- 1. The Ninth International Symposium on Information and Communication Technology (SoICT 2018)
- The third IEEE International Conference on Image Processing, Applications and Systems (IPAS 2018), 12-14 December 2018, University of Nice Sophia Antipolis, France
- 3. The 10th International Conference on Knowledge and Systems Engineering (KSE), Hue, Vietnam, 2018
- 4. The 5th Conference on Information and Computer Science (NICS), Hanoi, 2018
- 5. The 12th Multi-Disciplinary International Conference on Artificial Intelligence (MIWAI 2018), Hanoi, Vietnam
- 6. The first International Conference on Multimedia Analysis and Pattern Recognition (MAPR), 5-6 April 2018, HCM city, Vietnam
- CVR 2018: Special Session on Computer Vision and Robotics, ACIIDS 2018 (10th Asian Conference on Intelligent Information and Database Systems), Donghoi, Vietnam
- 8. 2018 IEEE Seventh International Conference on Communications and Electronics (ICCE)

2017

- 1. 19th International Conference on Image Analysis and Processing -ICIAP 2017, Catania, Italy
- 2. The 20th National Symposium of Selected ICT Problems, 2017, Quang Binh, VietNam
- 3. The 9th International Conference on Knowledge and Systems Engineering (KSE), Hue, Vietnam, 2017
- 4. The Eighth International Symposium on Information and Communication Technology (SoICT 2017), NhaTrang, VietNam.
- 5. The 4th Conference on Information and Computer Science (NICS), Hanoi, 2017

2016

- 1. The Seventh International Symposium on Information and Communication Technology (SoICT 2016), HoChiMinh, Vietnam
- 2. The Eighth International Conference on Knowledge and Systems Engineering (KSE 2016) Hanoi, Vietnam
- 3. The sixth International Conference on Communications and Electronics (ICCE), HaLong, 2016.
- 4. The 3rd NAFOSTED Conference on Information and Computer Science), Vietnam, 2016
- 2015
 - 1. The 2015 National Conference on Electronics, Communications, and Information Technology ECIT 2015
 - The 1st International Workshop on Pattern Recognition for Multimedia Content Analysis (PR4MCA 2015), In conjunction with the 7th International Conference on Knowledge and System Engineering Ho Chi Minh City, Vietnam, October 10, 2015
 - 3. The sixth symposium on Information and Communication Technology (SoICT), 2015, Hue, VietNam.
 - 4. The 3rd International Conference on Computing, Management and Telecommunications (ComManTel 2015), Da Nang, Vietnam
 - 5. The International Conference on Advanced Technologies for Communications (ATC), 2015, Hanoi, Viet Nam.
 - 6. The second NAFOSTED Conference on Information and Computer Science), Vietnam, 2015
- 2014
 - 1. The fifth symposium on Information and Communication Technology (SoICT), 2014, Hanoi, VietNam.
 - 2. The International Conference on Advanced Technologies for Communications (ATC), 2014, Hanoi, Viet Nam.
 - 3. MobiApps 2014 (2014 International Workshop on Mobile Applications), 27-29 August 2014, Barcelona, Spain
 - 4. International Journal of Computing and Digital Systems (IJCDS), Volume 3, 2014.
 - 5. International Conference on Computer Vision and Image Analysis applications (ICCVIA' 2014), 2014.
 - 6. The 2nd International Conference on Computing, Management and Telecommunications (ComManTel 2014), Da Nang, Vietnam.
 - 7. Rencontre des Jeunes Chercheurs en Intelligence Artificielle (RJCIA), 2009.
 - 8. The 4th International Conference on Computer Sciences and Convergence Information Technology (ICCIT 2009http://www.aicit.org/iccit/), Nov. 24~26, 2009, Seoul, Korea.
 - 9. The 4th International Conference on New Trends in Information Science and Service Science (NISS) <u>http://www.aicit.org/NISS/index.html</u>, 2010, Korea, May 11-13.
 - 10. The 2nd International Workshop on Multimedia and Semantic Technologies (MUST 2011), Greece.

Reviewer for:

- 1. Pattern Recognition, 2019
- 2. IEEE Access, 2019
- 3. Journal of Computer Science and Cybernetics, 2018
- 4. ACM Multimedia Conference, 2018
- 5. ACM Multimedia Conference, 2016
- 6. International journal of Machine Vision and Applications, 2016
- 7. International journal of Image Mining, 2015
- 8. The 2015 IEEE International Conference on Multimedia and Expo (ICME 2015).
- Journal of Research, Development and Application on Information & Communications Technology (Vietnamese journal), 2015
- 10. Journal of Le Quy Don University (Vietnamese journal), 2015
- 11. The International Visual Communications and Image Processing Conference (VCIP) 2014, Malta
- 12. The first NAFOSTED Conference on Information and Computer Science), Vietnam, 2014
- 13. The International Visual Communications and Image Processing Conference (VCIP) 2013, Malaysia.

- 14. The International Conference on Advanced Technologies for Communications (ATC), 2013, HoChiMinh city, Viet Nam.
- 15. Journal of Science and Technology, Technical Universities (Vietnamese journal).
- 16. Imaging Science Journal.
- 17. The International Conference on Communications and Electronics (ICCE) in 2010 (Nha Trang), in 2012 (Hue).
- 18. International conference on Sciences of Electronics, Technologies of Information and Telecommunications (SETIT) in 2009, 2010, 2011.

Member of committee for:

- 19. Member of MICA committee (2017-2020)
- 20. Member of scientific committee of HUST research program on perceptive environment from 2010 to 2015.
- 21. Member of MICA scientific committee since 2012
- 22. Member and Treasurer of VAPR (Vietnamese Association for Pattern Recognition) since 2015
- **23.** Member of IEEE Vietnam Section Women In Engineering Affinity Group since 2015