

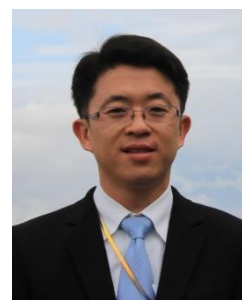
Curriculum Vitae

Theekapun Charoenpong, Assoc. Prof., D.Eng

Department of Biomedical Engineering

Srinakharinwirot University, Thailand

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Information:

Laboratory: Image Processing Laboratory: Dr. Theekapun Charoenpong

Link of Laboratory: <https://sites.google.com/site/theekapunch/>

Google Scholar Citations:

Theekapun Charoenpong: <https://scholar.google.co.th/citations?hl=en&user=ERaFa64AAAAJ>

Education:

- | | |
|------------|---|
| 2005 -2008 | Doctor of Engineering,
Electrical and Electronics Engineering Program
University of Fukui, Japan.
Dissertation: Facial Expression Recognition Based on Facial Reconstruction |
| 2003-2005 | Master of Engineering
Department of Electronic and Telecommunication Engineering,
King Mongkut's University of Technology Thonburi, Thailand. |
| 1997-2001 | Bachelor of Engineering
Department of Electronics Engineering
King Mongkut's Institute of Technology Ladkrabang, Thailand. |

Experiences:

- 2018-2019: Secretary, ECTI Board Committee, Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology Association of Thailand (ECTI Thailand)
- September 16, 2016: Associate Professor at Biomedical Engineering, Srinakharinwirot University, Thailand
- 2013 April-May: Visiting Lecturer at University of Fukui
- January 28, 2011: Assistant Professor at Biomedical Engineering, Srinakharinwirot University, Thailand
- 2008-2011: Lecturer at Biomedical Engineering, Srinakharinwirot University, Thailand
- 2007: Teaching Assistant, Physics Engineering Department, University of Fukui.
- 2005: Senior Test Engineer, Western Digital Corporation.
- 2002-2005: Inspection Engineer, Institute of Electrical and Electronics.
- 2001-2002: Test Engineer, Read-Rite Corporation.
- 2000: Summer Training, Tokai University at Japan

Research Interests:

- Image Processing
- 3D Human Face Expression Recognition
- Computer Vision
- Background Modelling
- Occluded Face Detection
- Animal Behaviour Analysis
- Surveillance System

Classes:

- Electrical and Electronics Engineering
- Fundamental of Computer Design and Logic
- Fundamental of Image Processing
- Pattern Recognition
- C programming for Image Processing
- Matlab for Image Processing
- Computer Vision

Honours:

- Monbukagakusho Scholarship, 2005-2008
- Public Sector Innovation Scholarship (Thai Royal Scholarship), 2008-2013

Awards

- **Best Paper Award:** P. Sa-nguannarm, W. Senavongse, **T. Charoenpong**, and K. Kiatsoontorn, "Hand Movement Recognition by Using a Touchless Sensor for Controlling Images in Operating Room," The 6th Int. Electrical Engineering Congress (IEECON2018), Thailand, 2018, pp: 21-24.
- **Broze Madal:** **T. Charoenpong**, M. Visan, Ch. Theerasak, P. Preeyanan, Th. Srisupang, J. Thananan, "Nystagmus Detection System for Vertigo Diagnosis System", 43rd International Exhibition of Inventions of Gevena, April 15-19, 2015.
- **Broze Madal:** **T. Charoenpong**, S. Patarida, "Occluded Face Detection Software fromm Image Sequence for Surveillance System", 43rd International Exhibition of Inventions of Gevena, April 15-19, 2015.

Editor, Reviewer, Technical Program Committee:

- Secretary, Int. Workshop on Advanced Image Technology, 2018.
- Technical Program Chair, the 6th Int. Electrical Engineering Congress, 2018
- Technical Program Chair, KST International Conference, 2016, 2017, 2018
- Associate Editor, ECTI-CIT Transaction, 2015-present
- The International Conference of Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI), Thailand 2012, 2014

Book:

- Th. Charoenpong. (2015). *Applications of MATLAB in Digital Image Processing*. Bangkok, Charansanitwong Printing

Journals:

1. L. Rerksuppaphol, Th. Charoenpong, S. Rerksuppaphol, "Randomized Clinical Trial of Facial Acupuncture with or without Body Acupuncture for Treatment of Melasma", *Complementary Therapies in Clinical Practice*, Vol. 12, Feb. 2016, pp: 1-7.
2. CHAROENPONG, T., & SANITTHAI, P. (2014). A New Algorithm to Detect Occluded Face from a Head Viewpoint using Hough Transform and Skin Ratio. *Walailak Journal Of Science And Technology (WJST)*, 12(1), 35-49. doi:10.14456/vol12iss8pp.
3. Th. Charoenpong, T. Shogo and H. Hase, "Facial Expression Recognition from 2.5D Partial Face Data by Using Face Plane", *ECTI Transactions on Electrical Eng., Electronics, and Communication*, 2010, Vol. 8, No. 1, pp: 32-42.
4. Th. Charoenpong, T. Shogo and H. Hase, "3D Face Reconstruction by a Partial Face Image", *The Journal of the Institute of Image Electronics Engineers of Japan*, 2008, Vol.34, No.4, pp: 476-485.

International Conferences:

1. P. Khunarsar, N. Benjathum, , **T. Charoenpong**, and A. Jariyapongskul, "A Method of Swimming Rat Detection in Morris Water Maze by Using Image Processing," *The 6th Int. Electrical Engineering Congress (IEECON2018)*, Thailand, 2018, pp: 29-33.
2. P. Sa-nguannarm, W. Senavongse, **T. Charoenpong**, and K. Kiatsoontorn, "Hand Movement Recognition by Using a Touchless Sensor for Controlling Images in Operating Room," *The 6th Int. Electrical Engineering Congress (IEECON2018)*, Thailand, 2018, pp: 21-24. (Best Paper Award).
3. P. Neampradit, **T. Charoenpong**, D. Sueaseenak, and C. Sukjamsri, "A Method of Thai Main Dish and Soup Classification by Gray Level Co-occurrence Metrix Algorithm," *The 6th Int. Electrical Engineering Congress (IEECON2018)*, Thailand, 2018, pp: 17-20.
4. N. Suwatkitiwong, **T. Charoenpong**, C. Sukjamsri, and T. Ouypornkochagorn, "Human Height Measurement by Square Template," *The 6th Int. Electrical Engineering Congress (IEECON2018)*, Thailand, 2018, pp: 25-28.
5. S. Ekkasan, K. Chamnongthai, **T. Charoenpong**, S. Charoensiriwath, "A Method to Read Numbers in Thai Nutritioni Facts Label by using SVM" *Int. Workshop on Advanced Image Technology 2018*, Thailand, 2018, pp: 1-4.
6. P. Sombatpiboonporn, **T. Charoenpong**, P. Charoenpong, "A New Method of Gait Recognition by Human Joint Projection and Closest Distance Technique," *the 21st Int. Computer Science and Engineering Conference 2017*, Thailand, 2017, pp:1-4.
7. S. Pattamaset, **T. Charoenpong**, P. Charoenpong and C. Chianrabutra, "Human fall detection by using the body vector," *2017 9th International Conference on Knowledge and Smart Technology (KST)*, Chonburi, 2017, pp. 162-165.
8. P. Puttapirat and **T. Charoenpong**, "Hand posture estimation from 2D image sequence by hand landmark identification," *2017 9th International Conference on Knowledge and Smart Technology (KST)*, Chonburi, 2017, pp. 294-298.

9. A. Poonsri, N. Aimjirakul, T. Charoenpong and C. Sukjamsri, "Teeth segmentation from dental x-ray image by template matching," *2016 9th Biomedical Engineering International Conference (BMEiCON)*, Laung Prabang, 2016, pp. 1-4.
10. S. Potikanya, T. Lertpithaksoonthorn, A. Meechai, R. Mungauamklang, P. Keaokao, C. Sukjamsri, C. Chianrabutra and T. Charoenpong, "Development of facial expression recognition by significant sub-region," *2016 8th International Conference on Knowledge and Smart Technology (KST)*, Chiangmai, Thailand, 2016, pp. 201-204.
doi: 10.1109/KST.2016.7440480
11. A. Poonsri, S. Charoensiriwath and T. Charoenpong, "The method to read nutrient quantity in guideline daily amounts label by image processing," *2016 8th International Conference on Knowledge and Smart Technology (KST)*, Chiangmai, Thailand, 2016, pp. 211-214.
doi: 10.1109/KST.2016.7440492
12. T. Charoenpong, T. Jantima, C. Chianrabupra and V. Mahasitthiwat, "A new method to estimate rotation angle of a 3D eye model from single camera," *2015 International Conference on Intelligent Informatics and Biomedical Sciences (ICIIBMS)*, Okinawa, Japan, 2015, pp. 398-402.
doi: 10.1109/ICIIBMS.2015.7439474
13. Ch. Theekapun, P. Preeyanan, M. Visan, "A New Method to Detect Nystagmus for Vertigo Diagnosis System by Eye Movement Velocity", *MVA2015 Int. Conf. on Machine Vision Applications*, May 18-22, Tokyo, Japan, 2015, pp: 174-177.
14. Theekapun Ch., Wimol Ch., Pucharas N., Ratirat S., and Watchareewan Th., "Local Foreground Extraction for Rat Walking Behavior Classification", *The 2015-7th Int. Conf. on Knowledge and Smart Technology (KST2015)*, Jan. 28-31, 2015, pp: 54-59.
15. P. Sarakon, Th. Charoenpong, and S. Charoensiriwath, "Face Shape Classification from 3D Human Data by using SVM," *Int. Conf. of Biomedical Engineering*, Japan, Nov., 2014, pp: 1-5.
16. Th. Charoenpong, Ch. Nuthong, U. Watchareeruitai, "A New Method for Occluded Face Detection from Single Viewpoint of Head", *2014 11th Int. Conf. on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology*, Thailand, May 14-17, 2014
17. P. Roongrojsub, S. Yartchimplee, A. Boonpratotong, Th. Charoenpong, "SWU-OFDB: A Database for Occluded Face Detection Research", *Int. Electrical Engineering Congress*, Mar., Thailand, 2014.
18. W. Chanchanachitkul, P. Nanthiyanurags, S. Rodamphop, W. Thongsaard, and Th. Charoenpong, "A rat walking behavior classification by body length measurement", *Int. Conf. of Biomedical Engineering*, Thailand, Oct, 2013.
19. P. Sarakon, Th. Charoenpong, and S. Charoensiriwath, "Nose tip detection using ellipsoid fitting for 2.5 D partial face data", *Int. Conf. of Biomedical Engineering*, Thailand, pp.1-5, 2013.
20. Ch, Theekapun, "Application of the Least Square Fitting of Ellipse Technique for Image Processing", *Int. Conf. on Digital Broadcasting*, Thailand, 25-28 Jul, 2013, pp: 1-4.
21. Ch, Theekapun, "Face Occlusion Detection by Ellipse Fitting and Skin Color Ratio", *Burapha University International Conference 2013*, Thailand, Jul., 4-5, 2013, pp: 1145-1151.

22. Ch. Theekapun, P. Preeyanan, Ch. Theerasak and M. Visan, "Accurate Pupil Extraction Algorithm by Using Integrated Method", 2013 4th International Conference on Knowledge and Smart Technology (KST2013), Thailand, Jan. 31- Feb. 1, 2013, pp: 32-37.
23. Ch. Theekapun, Pr. Yuttachon, Th. Phatchariya, S. Wongwit, and Th. Watchareewan, "An Experimental Setup for Measuring Distance and Duration of Rat Behavior", The 2012 Biomedical Engineering Int. Conf. (BMEiCON-2012), Thailand, Dec. 5-7, 2012.
24. Ch. Theekapun, Th. Srisupang, Ch. Theerasak and M. Visan, "Accuracy Improvement of Pupil Extraction by Using Shape Estimation Algorithm", 2012 International Workshop on Smart Info-Media Systems in Asia (SISA 2012), Thailand, Sep 6-8, 2012, pp: 33-38.
25. Ch. Theekapun, Th. Srisupang, Ch. Theerasak and M. Visan, "Pupil Extraction System for Nystagmus Diagnosis by Using K-Mean Clustering and Mahalanobis Distance Technique", 2012 4th International Conference on Knowledge and Smart Technology (KST), Thailand, July 7-8, 2012, pp: 24-29.
26. Ch. Theekapun, Ch. Theerasak and R. Somphop, "Improvement of Human Head Detection by Using Head Region Identification Algorithm and Ellipse Fitting Technique", The 10th International PSU Engineering Conference, Thailand, May 14-15, 2012.
27. Ch. Theekapun, "Human Head Detection by Using Partial Head Contour", Int. 2011 3th International Conference on Knowledge and Smart Technology (KST), pp: 29-32, Thailand, July 9-10, 2011.
28. Ch. Theekapun, "A Survey of Face Occlusion Detection for Visual Surveillance System", 2010 2th International Conference on Knowledge and Smart Technology (KST), pp: 1-5, Thailand, July 24-24, 2010.
29. C. Nuthong and T. Charoenpong, "Lane Detection using Smoothing Spline", 3rd International Congress on Image and Signal Processing, pp: 989-993, China, Nov. 2010.
30. Ch. Theekapun, S. Ajaree and N. Chaiwat, "Adaptive Background Modeling from an Image Sequence by Using K-Means Clustering", Int. Conf. ECTI-CON 2010, pp: 880-883, Thailand, May 19-21, 2010
31. Th. Charoenpong and S. Wongwit, "Facial Expression Recognition from Non-Frontal-View Face Data: A Brief Tutorial Overview", Int. Conf. BMEiCON2009, Phuket, Thailand, 2009.
32. Th. Charoenpong, T. Suchada, S. Ajaree, T. Shogo and H. Hase, "Facial Expression Recognition by Using Crossing Point Distribution", Int. Conf. ECTI-CON 2009, pp: 1046-1049, Thailand, May 6-9, 2009
33. Ch. Theekapun, S. Wongwit, T. Shogo and H. Hase, "Facial Expression Recognition from Partial Face Data by Using SVM", *Int. Symposium. ISBME 2008*, pp: 366-369, Thailand, 2008.
34. Th. Charoenpong, T. Shogo and H. Hase, "Facial Expression Recognition from a Partial Face Image by Using Displacement Vector", *Int. Conf. ECTI-CON 2008*, pp: 441-444, Thailand, 2008.
35. Theekapun, C.; Tokai, S.; Hase, H., "Facial expression recognition from a side view face by using face plane," Int. Conf. on Wavelet Analysis and Pattern Recognition, 2007. ICWAPR '07., vol.3, pp.1096-1101, 2-4 Nov. 2007, doi: 10.1109/ICWAPR.2007.4421596
36. Th. Charoenpong, H. Hase and T. Shogo, "A Novel Approach of 3D Face Reconstruction Using Ellipse Fitting", IAPR Conf. on Machine Vision Application (MVA2007), pp: 528-531, Tokyo, May, 2007
37. Th. Charoenpong, H. Hiroyoshi and T. Shogo, "Robust Nose Localization by Using Fitting of Ellipse", Int. Conf. IEEE TENCON2006, pp: 1-4, Hong Kong, Nov 14-17, 2006
38. Th. Charoenpong, P. Kumhom, and K. Chamnongthai, "Three-Dimensional Coordinate Measurement on Mango Surface by Using Laser Projection Light", Int. Conf. ECTI-CON 2005, Chonburi, Thailand, May 12-

13, 2005.

39. Th. Charoenpong, M. Krairiksh, P. Kamhom, and K. Chamnongthai, "Volume Measurement of Mango by Using 2D Ellipse Model", Int. Conf. on Industrial Technology (IEEE ICIT04), pp: 1438-1441, Tunisia, December 8-10, 2004

National Conferences:

1. Ch. Theekapun, S. Ajaree and N. Chaiwat, "Background and Foreground Segmentation from Sequence Images by Using Mixture of Gaussian Method and K-Means Clustering", The 8th PSU Engineering Conference, pp. 400-403, 22-23 April 2010.
2. Th. Charoenpong, H. Hiroyoshi and T. Shogo, "3D Face Reconstruction and Evaluation", 2007 Joint Conference of Hokuriku Chapters of Electrical Societies, Fukui, Japan, 2007
3. Th. Charoenpong, H. Hiroyoshi and T. Shogo, "Facial Symmetry Axis Detection by Fitting of Ellipse", Conf. Pattern Recognition and Media Understanding (PRMU), Fukui, Japan, March 13-15, 2006
4. Th. Charoenpong, H. Hiroyoshi and T. Shogo, "3D Reconstruction from a 2.5D Facial Image", 2006 Joint Conference of Hokuriku Chapters of Electrical Societies, Kanazawa, Japan, 2006