

Pished Bunnun

1. Personal Detail

Name: Pished Bunnun

Office: National Electronics and Computer Technology Center
112 Thailand Science Park, Phahonyothin Road, Klong 1, Klong
Luang, Pathumthani 12120

Tel: 02-564-6900 #2847

Fax: 02-564-6774

email: pished.bunnun@nectec.or.th



2. Education

1998 Chulalongkorn University, Bachelor Degree, Electrical Engineering

2001 Chulalongkorn University, Master Degree, Electrical Engineering

Thesis: A Novel Design for Multirate Output Controller Using The Lifting Approach

2012 University of Bristol, UK, Doctor of Philosophy, Computer Science

Thesis: In-situ image-based model building for Augmented Reality and Handheld Devices

3. Position

Researcher

4. Specialist

Augmented Reality, Virtual Reality, Machine Vision, Real-Time Digital Control System

5. Publications

1. Sooksatra, S., Kondo, T., Bunnun, P., & Yoshitaka, A. (2020). Redesigned Skip-Network for Crowd Counting with Dilated Convolution and Backward Connection. *Journal of Imaging*, 6(5), 28

2. Sooksatra, S., Kondo, T., Bunnun, P., & Yoshitaka, A. (2019), Headlight recognition for night-time traffic surveillance using spatial-temporal information. *Signal, Image and Video Processing*, 14(1), pages 107-114.
3. Sooksatra, S., Yoshitaka, A., Kondo, T., & Bunnun, P. (2019), The Density-Aware Estimation Network for Vehicle Counting in Traffic Surveillance System. *15th Signal Image Technology and Internet based Systems (SITIS)*, Sorrento, Italy, pages. 231-238
4. S. Gatesichapakorn, M. Ruchanurucks, P. Bunnun and T. Isshiki, "ROS-Based Mobile Robot Pose Planning for a Good View of an Onboard Camera using Costmap," 2019 10th International Conference of Information and Communication Technology for Embedded Systems (IC-ICTES), Bangkok, Thailand, 2019, pp. 1-6
5. K. Piemngam, I. Nilkhamhang and P. Bunnun, "Development of Autonomous Mobile Robot Platform with Mecanum Wheels," 2019 First International Symposium on Instrumentation, Control, Artificial Intelligence, and Robotics (ICA-SYMP), Bangkok, Thailand, 2019, pp. 90-93
6. K. Piemngam, I. Nilkhamhang and P. Bunnun, "A Virtual Spring Damper Method for Formation Control of the Multi Omni-directional Robots in Cooperative Transportation," 2019 11th International Conference on Information Technology and Electrical Engineering (ICITEE), Pattaya, Thailand, 2019, pp. 1-6
7. Sooksatra, S., Kondo, T., Bunnun, P., & Yoshitaka, A. (2018), A drowsiness detection method based on displacement and gradient vectors. *Songklanakarin Journal of Science Technology*, 40(3), pages 602-608. Sorn Sooksatra, Toshiaki Kondo, Pished Bunnun, Atsuo Yoshitaka, "Headlights Classification for Traffic Surveillance using a Structure Tensor Method with PADI", SICE, 2016
8. I S Ardakani, W Kongprawechnon, T Theeramunkong, P Bunnun, T Isshiki, A Manassakorn, "Parameterization of Limbus Distance in Van Herick Method's Angle Closure Glaucoma Diagnosis", IC-ICTES, 2016
9. W Ruengkitpinyo, P Vejjanugraha, W Kongprawechnon, T Kondo, P Bunnun, H Kaneko, "An Automatic Glaucoma Screening Algorithm using Cup-to-Disc Ratio and ISNT Rule with Support Vector Machine", IECON, 2015
10. Yoichi Nakaguro¹, Waqar S. Qureshi², Matthew N. Dailey², Mongkol Ekpanyapong², Pished Bunnun¹, and Kanokvate Tungpimolrut, "Volumetric 3D Reconstruction and Parametric

- Shape Modeling from RGB-D Sequences”, ICIAP 2015
11. Sorn Sooksatra, Toshiaki Kondo, Pished Bunnun, “A Robust Method for Drowsiness Detection using Distance and Gradient Vectors”, ECTI-CON, 2015
 12. W Ruengkitpinyo, Waree Kongprawechnon, Toshiaki Kondo, Pished Bunnun, H Kaneko, “Glaucoma Screening using Rim Width based on ISNT Rule”, IC-ICTES, 2015
 13. S Chumplue, T Kondo, I Nilkhamhang, P Bunnun, M Sato, “3D Room Reconstruction using Visual Odometry Guided Kinectfusion with RGB-D Camera”, IC-ICTES, 2014
 14. S. Yoon, S. Hyung, M. Lee, K.S. Roh, S. Ahn, A. Gee, P. Bunnun, A. Calway, W.W. Mayol-Cuevas, “Real-time 3D Simultaneous Localization and Map-Building for a Dynamic Walking Humanoid Robot”, Advanced Robotics, V. 27, Issue 10, 2013
 15. C. Theeraworn, W. Kongprawechnon, T. Kondo, P. Bunnun, A. Nishihara, A. Manassakorn, “Automatic Screening of Narrow Anterior Chamber Angle and Angle-Closure Glaucoma Based on Slit-Lamp Image”, Kasetsart Journal (Natural Science), 2013
 16. C. Theeraworn, W. Kongprawechnon, T. Kondo, P. Bunnun, A. Nishihara, A. Manassakorn, “Automatic Screening of Narrow Anterior Chamber Angle and Angle-Closure Glaucoma Based on Slit-Lamp Image Analysis by Using Support Vector Machine”, EMBC, 2013
 17. C. Theeraworn, W. Kongprawechnon, T. Kondo, P. Bunnun, A. Nishihara, A. Manassakorn, “Automatic Screening of Angle-Closure Glaucoma Based on Slit-Lamp Image Analysis”, IC-ICTES, 2013
 18. P. Bunnun, D. Damen, A. Calway, W. Mayol-Cuevas, “Integrating 3D Object Detection, Modelling and Tracking on a Mobile Phone”, ISMAR, 2012
 19. D. Damen, P. Bunnun, A. Calway, W. Mayol-Cuevas, “Real-time Learning and Detection of 3D Texture-less Objects: A Scalable Approach”, BMVC, 2012
 20. P. Bunnun, S. Subramanian and W. Mayol-Cuevas, “In-Situ Interactive Image-based Model Building for Augmented Reality from a Handheld Device”, Virtual Reality, Springer, January 2012
 21. P. Bunnun, D. Damen, S. Subramanian, W. W. Mayol-Cuevas, “Iterative Image-based Model Building for Handheld Devices”, ISMAR workshop at International Symposium on Mixed and Augmented Reality, October, 2010

22. P. Bunnun, W. W. Mayol-Cuevas, "OutlinAR: an assisted interactive model building system with reduced computational effort", 7th IEEE/ACM International Symposium on Mixed and Augmented Reality, October 2008
23. Savan Chhaniyara, Pished Bunnun, Lakmal D. Seneviratne, and Kaspar Althoefer, "Optical Flow Algorithm for Velocity Estimation of Ground Vehicles: A Feasibility Study", International Journal On Smart Sensing and Intelligent Systems p. 246-268, March, 2008
24. P. Bunnun, E. Pukprayura, M. Wongsaisuwan, "Variable Structure Control of One-Link Flexible Robot Arm", In Proceedings of the 23rd Electrical Engineering Conference (EECON). Pages 597-600, November 2000