

## Benjamas Panomruttanarug – Full List of Publications

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- INTERNATIONAL JOURNAL (SCOPUS) P. Areerob and B. Panomruttanarug, “**Iterative Learning Control for Lateral Tracking with Repeated Path in Autonomous Vehicles for Dynamic Environments,**” *International Journal of Control, Automation, and Systems*, vol. 21, no. 11, pp. 3712–3723, Sep. 2023.
- P. Chotikunnan, T. Puttasakul, R. Chotikunnan, B. Panomruttanarug, M. Sangworasil, and A. Srisirawat, “**Evaluation of Single and Dual image Object Detection through Image Segmentation Using ResNet18 in Robotic Vision Applications,**” *Journal of Robotics and Control*, Vol. 4, No.3, pp. 263–277, May 2023.
- B. Panomruttanarug, “**The optimal design of repetitive controllers based on inverse frequency response,**” *Optimal Control Applications and Methods*, pp. 1–18, Jan 2023.
- P. Chotikunnan, B. Panomruttanarug, and P. Manoonpong, “**Dual Design Iterative Learning Controller for Robotic Manipulator Application,**” *Journal of Control Engineering and Applied Informatics*, Vol. 24, No.3, pp. 76–85, 2022.
- P. Chotikunnan, and B. Panomruttanarug, “**Practical Design of a Time-Varying Iterative Learning Control Law Using Fuzzy Logic,**” *Journal of Intelligent & Fuzzy Systems*, Vol. 43, No. 3, pp. 2419-2434, Jul 2022.
- B. Panomruttanarug, “**Position Control of Robotic Manipulator Using Repetitive Control Based-on Inverse Frequency Response Design,**” *International Journal of Control, Automation, and Systems*, Vol. 18, No. 11, pp. 2830–2841, May 2020.
- B. Panomruttanarug, R. W. Longman, and M. Q. Phan, “**Steady State Frequency Response Design of Finite Time Iterative Learning Control,**” *Journal of Astronautical Sciences*, Vol. 67, No. 2, pp. 571–594, Dec. 2019.
- B. Panomruttanarug, “**Application of Iterative Learning Control in Tracking a Dubin’s Path in Parallel Parking,**” *International Journal of Automotive Technology*, Vol. 18, No. 6, pp. 1099-1107, Dec 2017.
- P. Chotikunnan, and B. Panomruttanarug, “**The Application of Fuzzy Logic Control to Balance a Wheelchair,**” *Control Engineering and Applied Informatics Journal*, Vol. 18, No. 3, pp. 41-51, Sep 2016.
- M. Q. Phan, R. W. Longman, B. Panomruttanarug, and S. C. Lee, “**Robustification of Iterative Learning Control and Repetitive Control by Averaging,**” *International Journal of Control*, Vol. 86, Issue 5, pp. 855-868, Mar 2013.
- INTERNATIONAL JOURNAL (OTHERS) P. Chotikunnan, B. Panomruttanarug, N. Thongpance, M. Sangworasil, and T. Matsuura, “**An Application of Fuzzy Logic Reinforcement Iterative Learning Control to Balance a Wheelchair,**” *International Journal of Applied Biomedical Engineering*, Vol. 10, No. 2, pp. 1-9, Jul-Dec 2017.
- K. Louadj, B. Panomruttanarug, A. C. B. Ramos, and F. Mora-Camino “**Solution of Differential Flat Systems Using Variational Calculus,**” *Transactions on Engineering Technologies*, 2016, pp. 17-29.
- B. Panomruttanarug and K. Higuchi, “**Fuzzy Logic Based Autonomous Parallel Parking System with Kalman Filtering,**” *SICE Journal of Control, Measurement, and System Integration*, Vol. 3, No. 4, pp. 266-271, July 2010.
- INTERNATIONAL PROCEEDINGS S. Duenkwang, C. Ketkarn, S. Wanichpho, and B. Panomruttanarug, “**Comparing Network RTK and Own RTK Base Station for Lateral Tracking in GNSS-Based Navigation: An Autonomous Golf Cart Study,**” International Conference on Control, Automation and Systems

(ICCAS), Yeosu, South Korea, Oct, 2023.

B. Panomruttanarug, T. Ketnoi, A. K. Ojha, and N. Boonruam, “**Design and Development of Navigation System for an Autonomous Vehicle,**” International Symposium on Instrumentation, Control, Artificial Intelligence, and Robotics (ICA-SYMP), Bangkok, Thailand, Jan, 2023.

B. Panomruttanarug, L. Thurnim, A.Kornwong, S. Promdum, and P.Tangwongsan, “**Practical Speed Control for an Autonomous Golf Cart,**” 2022 37th International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC), 2022, pp. 302-304.

P. Chuaychoo, B. Panomruttanarug, and M. Hirz, “**Implementation of 3D Shape Matching for EV Charging Connector,**” 2021 60th Annual Conference of the Society of Instrument and Control Engineers of Japan (SICE), 2021, pp. 498-501.

S. Liu, R. W. Longman, and B. Panomruttanarug, “**On Designing Finite Time Iterative Learning Control Based on Steady State Frequency Response,**” AAS/AIAA Astrodynamics Specialist Conference, Big Sky, Aug, 2021.

J. Manangan, B. Panomruttanarug, and T. Yaemglin “**On the Improvement of Variations in Producing Magnetic Heads Using Tracking Control,**” IEEE International Conference on Industrial Technology (ICIT), Melbourne, Australia, Feb, 2019.

W. Pornsukvitoon, B. Panomruttanarug, N. Chayopitak, S. Kreuawan, and F. Mora-Camino “**Torque Ripple Reduction in Brushless DC Motor Using Repetitive Control,**” IEEE International Conference on Advanced Intelligent Mechatronics (AIM), Munich, Germany, Jul, 2017.

M. Garcia Colon, E. Martinez Lizuain, A. C. Brandao Ramos, B. Panomruttanarug, and F. Mora-Camino “**A Graph Theory Approach for the Design of Corridors for Unmanned Flying Devices over Urban Areas,**” International Conference of Hong Kong Society for Transportation Studies (HKSTS), Hong Kong, Dec, 2016.

M. A. Wahid, B. Panomruttanarug, A. Drouin, F. Mora-Camino “**Space-Indexed Aircraft Trajectory Tracking,**” Proceedings of the IEEE Chinese Control and Decision Conference (CCDC), 2016, pp. 5232-5237.

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N. Trirattanawananon, B. Panomruttanarug, K. Higuchi, and F. Mora-Camino, “**Simulation and Experimental Study on Attitude Control of Quadrotor,**” Proceedings of the IEEE International Conference on Robotics and Biometrics (ROBIO), 2014, pp. 1719-1724.

B. Panomruttanarug, P. Chotikunna, “**Self-Balancing iBOT-Like Wheelchair Based on Type-1 and Interval Type-2 Fuzzy Control,**” 11th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), Nakhon Ratchasima, Thailand, May, 2014.

B. Panomruttanarug, K. Higuchi, and F. Mora-Camino “**Attitude Control of a Quadrotor Aircraft Using LQR State Feedback Controller with Full Order State Observer,**” Proceeding of International Conference on Instrumentation, Control and Information Technology (SICE), 2013, pp. 2041-2046.

B. Panomruttanarug, R. W. Longman, and M.Q. Phan, “**Repetitive Control of Digital Systems Having Fast Phase Change Produced in the Discretization,**” AAS/AIAA Astrodynamics Specialist Conference, South Carolina, USA, Aug, 2013.

T. Jatturongkapolkul and B. Panomruttanarug, “**Frequency Domain System Identification for Servo System in HGA Testing System Using Particle Swarm Optimization,**” Proceedings of the IEEE Industrial Electronics Society, 2011, pp. 587-591, ISBN 978-1-61284-969-0.

B. Panomruttanarug, R. W. Longman, and M.Q. Phan, “**Designing Stable Iterative Learning Control Systems from Frequency Based Repetitive Control Designs,**” AAS/AIAA

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A. Vorashompoo, B. Panomruttanarug, and K. Higuchi, “**Bidirectional Best First Based Autonomous Parallel Parking System**,” *8th International Conference on Electrical Engineering/Electronics, Computer, Telecommunication and Information Technology (ECTI2011)*, 2011, pp. 593-596, ISBN 978-1-4577-0425-3.

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NATIONAL JOURNAL P. Roopyai and B. Panomruttanarug, “**Positioning Error Reduction in Robotic Manipulator SEIKO D-TRAN RT3200 Using Repetitive Control,**” *The Journal of King Mongkut’s University of Technology North Bangkok*, Vol. 28, No. 2, pp. 299-312, Apr-Jun 2018.

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P. Pukasub, A. Lerdasawadumrongkul, and B. Panomruttanarug, “**Self Balancing Robot Using Kalman Filter and PID Controller,**” *the 34th Electrical Engineering Conference (EECON-34)*, Pattaya, Thailand, Oct, 2011.

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