

## **Dr. Narong Apheratsakun**

Awarded St. Thomas Aquinas Award for Research (Third Class)

### **Citation:**

Dr. Narong Apheratsakun joined Assumption University in November 2001. He is currently the Acting Chairperson of Mechatronics Engineering, School of Engineering. Dr. Narong received his B.Eng with Magna Cum Laude (Second Class Honour) in Electrical Engineering and M.Eng in Power Electronics Engineering from Assumption University, in 2001 and 2004 respectively. He received his Ph.D. in Mechatronics Engineering from Asian Institute of Technology in 2010.

Dr. Narong's research interests include control system, mechatronics, robotics and embedded system. He has conducted research and has had research papers published in proceedings of national and international conferences and international journals.

Dr. Narong has greatly encouraged his 4<sup>th</sup> year students to join in competitions and write papers for conferences. In 2011, Dr. Narong brought his students to the Bicyrobo Competition. These students published two papers in the proceedings of the ECTI Conference on Application Research and Development (CARD) in the year 2012. In March 2013, he sent two groups of students to the IEEE Thailand Student Conference on Senior Capstone Project, where one of these groups received the fourth runner-up award from 82 groups nationwide. In October 2013, Dr. Narong sent three groups of students to the Second Joint Seminar on Control System. These students have published a paper for the IEEE 2014 International Electrical Engineering Congress which will be held in March 2014.

The highlights of Dr. Narong's research publications are as follows.

1. Apheratsakun N., Chirungsarpsook K., Parnichkun M. (2008). "Design and Balancing Control of AIT Leg Exoskeleton-I (ALEX-I)", Proceedings of 5th International Conference on Informatics in Control, Automation and Robotics, Funchal, Madeira-Portugal, 11-15 May 2008, pp. 151-158.
2. Narong Apheratsakun and Manukid Parnichkun (2009). Balancing Control of AIT Leg Exoskeleton Using ZMP based FLC, International Journal of Advanced Robotic Systems, ISSN: 1729-8806, IN-TECH, Vol. 6, No. 4, pp. 319-328.
3. Narong Apheratsakun and Manukid Parnichkun (2010). Balancing Control of Leg Exoskeleton Using ZMP-based Jacobian Compensation, International Journal of Robotics and Automation, ISSN: 0826-8185, ACTA Press, Vol. 25, No. 4, pp. 359-371.
4. Janwattanapong, P., Ratchatanantakit, N., Tangnimitchok, S., O-larnnithipong, N., Apheratsakun, N.(2012). "Implementation and Design of the AU Self-Balancing Bicycle (AUSB)", The ECTI Conference on Application Research

and Development (CARD) 2012, Pathumthani, Thailand, 21-22 June 2012, pp. 343-347.

5. Pluemworasawat, P., Vathunyoppracha, S., Ounchanum, P., O-larnnithipong, N., Aphiratsakun, N. (2012). "Way-Point Control of the AU Self-Balancing Bicycle (AUSB) using Compass and Encoder Sensors", The ECTI Conference on Application Research and Development (CARD) 2012, Pathumthani, Thailand, 21-22 June 2012, pp. 354-357.
6. Aphiratsakun, N., Techakittiroj, K. (2012). "Single Loop and Double Loop Control of AU Self-Balancing Bicycle (AUSB)", The IEEE International Conference on Robotics and Biomimetics (Robio 2012), Guangzhou, China, 11-14 December 2012, pp. 2062-2066.
7. Yensuong H., Sulsaksakul P., Rattanasetyuth P., Detkrut P., Laokhonkha P., Aphiratsakun, N.(2013). "AU Golf Car: Autonomous Parking System", IEEE Thailand Student Conference on Senior Capstone Project (SCAP 2013), Bangkok, Thailand, 29 March 2013.
8. Agrawal A., Jirundorn K., Punyachai T., Mogakolodi S. H., Aphiratsakun, N. (2013). "AU Golf Car: Obstacles Avoidance System", IEEE Thailand Student Conference on Senior Capstone Project (SCAP 2013), Bangkok, Thailand, 29 March 2013.

For all his contributions, devoting himself to research activities and encouraging his students to do research and write papers, Assumption University is pleased to confer the St. Thomas Aquinas Award for Research (Third Class) on Dr. Narong Aphiratsakun on this auspicious date of December 24, 2013.