

# Innovative AIoT technology development and application

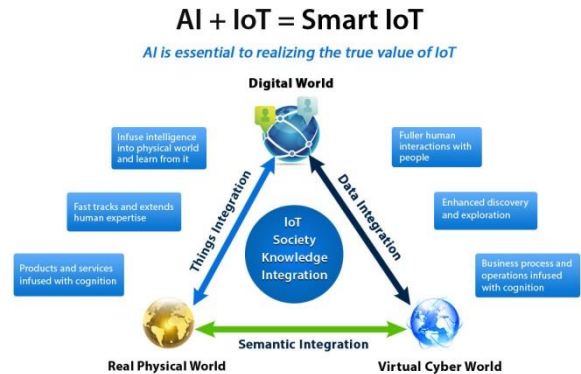
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## Abstract

Looking forward to the industry trend in 2018, AI and IoT will rapidly merge and evolve into Intelligent IoT (AIoT). Under the trend of the Internet of Things, the amount of data in each application field will become larger and larger in the future. The AIoT processor must be able to perform the calculation results in an instant and efficient manner, and the overall system construction efficiency can be generated. AIoT's high efficiency and high flexibility must rely on perfect system design. The application of IoT is rapidly expanding. The materials and components used in the future will increase rapidly. In response to this trend, system verification must also be improved. The system emphasizes high integration, so not only the chip, material, and system architecture must be fully verified. The role of communication in the Internet of Things is also very important. The application environment of the Internet of Things is different. Designers must choose the appropriate communication standard for their system characteristics. With the accelerated introduction of intelligent applications in various fields, the industrialization of AIoT has taken shape. The industry has begun to actively develop in the past years, and the development of AIoT is still worth our expectation.

## Speech Issue Topics:

1. The Industry 4.0 architecture
2. A real-time AIoT
3. Wireless sensor networks System Application
4. "production + service" or "service".
5. AI+Big-Data+Cloud+ IoT



## Recent Publications

- [1] Wen-Tsai Sung\*, Jui-Ho Chen, Kung-Wei Chang, "Mobile Physiological Measurement Platform with Cloud and Analysis Functions Implemented via IPSO", IEEE Sensors Journal, Volume:14, Issue: 1, pp 111 – 123, Jan. 2014 (SCIE/EI) IF: 1.475,.
- [2] Wen-Tsai Sung\*, Kuo-Yi Chang, "Evidence-based Multi-Sensor Information Fusion for Remote Health Care Systems", Sensors and Actuators A: Physical,, Volume 204, Issue 15 December 2013, Pages 1-19 (SCIE/EI) IF: 1.802.
- [3] Wen-Tsai Sung\*, Chia-Cheng Hsu, "Intelligent Environment Monitoring System Based on Innovative Integration Technology via PSoC Platform and ZigBee Network", IET Communications, Volume 7, Issue 16, 05 November 2013, pp 1789 – 1801, (SCIE/EI) IF: 0.637.
- [4] Wen-Tsai Sung\*, Jui-Ho Chen, Kung-Wei Chang, "Study on a Real-Time BEAM System for Diagnosis Assistance based on System on Chips", Sensors, , 2013, 13(5), 6552-6577 (SCIE/EI) IF: 1.953.
- [5] Wen-Tsai Sung\*, Ming-Han Tsai, "Data Fusion of Multi-Sensor for IOT Precise Measurement Based on Improved PSO Algorithms", Computers and Mathematics with Applications, Elsevier Company. Volume 64, Issue 5, September 2012, Pages 1450–1461 (SCIE/EI) IF: 2.069.

## Biography



Wen-Tsai Sung is working with the Department of Electrical Engineering, National Chin-Yi University of Technology as a Distinguished professor and Dean of Academic Affairs. He received a PhD and MS degree from the Department of Electrical Engineering, National Central University, Taiwan in 2007 and 2000. He has won the 2009 JMBE Best Annual Excellent Paper Award and the dragon thesis award that sponsor is Acer Foundation. His research interests include Wireless Sensors Network, Data Fusion, System Biology, System on Chip, Computer-Aided Design for Learning, Bioinformatics, and Biomedical Engineering. He has published a number of international journal and conferences article related to these areas. Currently, he is the chief of Wireless Sensors Networks Laboratory. At present, he serves as the Editor-in-Chief in three international journals: International Journal of Communications (IJC), Communications in Information Science and Management Engineering (CISME) and Journal of Vibration Analysis, Measurement, and Control (JVAMC), he also serves as the other international journals in Associate-Editor and Guest Editor (IET Systems Biology).

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