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Education
- PhD, Department of Electronic Engineering, National Kaohsiung University of Science and Technology, 2020/7

Area of Specialty
- Internet of Things System
- Biomedical Information System
- Machine (deep) learning
- Mechatronics
- Wireless sensor network

Academic Experience
- Assistant Professor, Department of Information Management, Southern Taiwan University of Science and Technology, 2021/8 to Present

Publications

Journal Papers

1. H. Hendrick, R. Hidayat, G. -J. Horng and Z. -H. Wang, "Non-Invasive Method for Tuberculosis Exhaled Breath Classification Using Electronic Nose," in IEEE Sensors Journal, vol. 21, no. 9, pp. 11184-11191, 1 May1, 2021. 【SCI-Q1-Journal】

2. Zhi-Hao Wang, Gwo-Jiun Horng, Hendrick and Gwo-Jia Jong, " A vehicle safety monitoring system based on the Internet of things and the identification of physiological characteristics," in Computers & Electrical Engineering, vol. 89, 2021. 【SCI-Q1-Journal】

3. Aripriharta, W. Z. Hao, Muladi, G. -J. Horng and G. -J. Jong, "A New Bio-Inspired for Cooperative Data Transmission of IoT," in IEEE Access, vol. 8, pp. 161884-161893, 2020. 【SCI-Q1-Journal】

4. Z. Wang, G. Horng, T. Hsu, C. Chen and G. Jong, "A Novel Facial Thermal Feature Extraction Method for Non-Contact Healthcare System," in IEEE Access, vol. 8, pp. 86545-86553, 2020. 【SCI-Q1-Journal】

5. C. Lin, Z. Wang* and G. Jong, "A De-Identification Face Recognition Using Extracted Thermal Features Based on Deep Learning," in IEEE Sensors Journal, vol. 20, no. 16, pp. 9510-9517, 15 Aug.15, 2020. 【SCI-Q1-Journal】

6. G. Jong, Z. Wang, Hendrick, K. Hsieh and G. Horng, "A Novel Adaptive Optimization of Intragrated Network Topology and Transmission Path for IoT System," in IEEE Sensors Journal, vol. 19, no. 15, pp. 6452-6459, 1 Aug.1, 2019. 【SCI-Q1-Journal】

7. G. Jong, Hendrick, Z. Wang, K. Hsieh and G. Horng, "A Novel Feature Extraction Method an Electronic Nose for Aroma Classification," in IEEE Sensors Journal, vol. 19, no. 22, pp. 10796-10803, 15 Nov.15, 2019. 【SCI-Q1-Journal】

8. Wang, Zhi-Hao, et al. "A Prediction Method for Voltage and Lifetime of Lead–Acid Battery by Using Machine Learning." Energy Exploration & Exploitation, vol. 38, no. 1, Jan. 2020, pp. 310–329. 【SCI-Q2-Journal】

9. Z. Wang, G. Horng, T. Hsu, et al. Heart sound signal recovery based on time series signal prediction using a recurrent neural network in the long short-term memory model. J Supercomput (2019). 【SCI-Q2-Journal】

10. H. Lin, C. Jung, T. Huang, Hendrick, and Z. Wang, "NB-IoT Application on Decision

Support System of Building Information Management," in Wireless Personal Communications, 27 Apr 2020. 【SCI-Q3-Journal】

11. C. Lin, Z. Wang*, G. Jong, " A research on relevance between photoplethysmography signal and perceptual stimulation", in International Journal of Modern Physics B, vol. 34, no. 22n24, 2040129,2020. 【SCI-Q4-Journal】

12. Gwo-Jia Jong, Hendrick Hendrick, Zhi-Hao Wang, Dedi Kurniadi, Aripriharta Aripriharta and Gwo-Jiun Horng,"Implementation of Otsu's Method in Vein Locator Devices," in International Journal on Advanced Science, Engineering and Information Technology, vol. 8, no. 3, pp. 743-748, 2018. doi: http://dx.doi.org/10.18517/ijaseit.8.3.4414

Conference Papers

1. T. -M. Wang, Z. -H. Wang, P. -J. Cheng, W. -C. Hsieh, C. -H. Kuo and G. -J. Jong, "A Research on Relevance Between Photoplethysmography Signal and External Stimuli," 2020 IEEE 2nd Eurasia Conference on Biomedical Engineering, Healthcare and Sustainability (ECBIOS), Tainan, Taiwan, 2020, pp. 204-207.

2. H. Hendrick, W. Zhi-Hao, C. Hsien-I, C. Pei-Lun and J. Gwo-Jia, "IOS Mobile APP for Tuberculosis Detection Based on Chest X-Ray Image," 2019 2nd International Conference on Applied Information Technology and Innovation (ICAITI), Denpasar, Bali, Indonesia, 2019, pp. 122-125.

3. Z. Wang, Y. Kung, Hendrick, P. Cheng, C. Wang and G. Jong, "Enhance Wireless Security System Using Butterfly Network Coding Algorithm," 2018 International Conference on Applied Information Technology and Innovation (ICAITI), Padang, Indonesia, 2018, pp. 135-138.

4. Z. Wang, W. Hsieh, H. Hendrick, Y. Kung, C. Wang and G. Jong, "Capturing Physiological Signal by Using Micro Biomedical Device," 2018 International Conference on Applied Engineering (ICAE), Batam, 2018, pp. 1-5.

5. Z. Wang, Hendrick, C. Wang and G. Jong, "Vehicle Safety Monitoring System Based on Internet of Things and Identification with Physiological Characteristics," 2018 1st IEEE International Conference on Knowledge Innovation and Invention (ICKII), Jeju, 2018, pp. 124-127.

6. Hendrick, Z. Wang, C. Wang and G. Jong, "Feature Extraction of the VSD Heart Disease based on Audicor Device Measurement," 2018 1st IEEE International Conference on Knowledge Innovation and Invention (ICKII), Jeju, 2018, pp. 138-141.

7. Y. Kung, S. Liou, G. Qiu, B. Zu, Z. Wang and G. Jong, "Home monitoring system based internet of things," 2018 IEEE International Conference on Applied System Invention (ICASI), Chiba, 2018, pp. 325-327.

8. W. Zhi-Hao, D. Kurniadi, K. Yu-Fan, Hendrick, J. Gwo-Jia and H. Gwo-Jiun, "Wireless network home health care system of social welfare institution," 2017 5th International Conference on Electrical, Electronics and Information Engineering (ICEEIE), Malang, 2017, pp. 146-151.

9. W. Zhi-Hao, Hendrick, K. Yu-Fan, C. Chuan-Te, L. Shi-Hao and J. Gwo-Jia, "Controlling DC motor using eye blink signals based on LabVIEW," 2017 5th International Conference on Electrical, Electronics and Information Engineering (ICEEIE), Malang, 2017, pp. 61-65.

10. W. Zhi-Hao, L. Siou-Wei, C. Yaw-Jong, H. Shih-Hsien, L. Yen-Cheng and J. Gwo-Jia, "Study on vehicle safety image system optimization," 2017 5th International Conference on Electrical, Electronics and Information Engineering (ICEEIE), Malang, 2017, pp. 96-101.

11. W. Zhi-hao, K. Yu-Fan, C. Yu-Yan, Hendrick, Aripriharta and J. Gwo-Jia, "Mobile device combine the study of image track and surveillance monitor system," 2017 5th International Conference on Electrical, Electronics and Information Engineering (ICEEIE), Malang, 2017, pp. 83-87.

12. Hendrick, Jyun-Teng Jheng, Chen-Chai Tsai, Jia-Wei Liou, Zhi-Hao Wang, Gwo-Jia Jong, "Wisdom Appliance Control System," 2017 IOP Conf. Ser.: Earth Environ. Sci., vol. 73, p. 012027.
13. Hendrick, Chen-Chai Tsai, Jyun-Teng Jheng, Zhi-Hao Wang, Gwo-Jia Jong, "Complex Power System for Lithium Batteries and Lead-Acid Batteries," MATEC Web Conf., vol. 95, p. 03002, 2017.
14. Chih-Chao Hsu, Mao-Yuan Pai, Shu-Yi Liaw, Tz-Heng Hsu and Zhi-Hao Wang, "The Selection of Variables for Cabbages Price Fluctuation Prediction by Factor Analysis," International Computer Symposium 2020 (ICS 2020), Tainan, 2020.
15. Riandini, Hendrick, Rahmat Hidayat, Zhi-Hao Wang and Gwo-Jiun Horng, "Mask RCNN Methods for Eyes Modelling," International Computer Symposium 2020 (ICS 2020), Tainan, 2020.
16. Hao-Hsuan Tsou, Kuang-Di Lee, Zhi-Hao Wang and Chung-Ching Huang, "The Feature Extraction Modeling of Product Analysis in Injection Molding for Intelligent Manufacturing," International Computer Symposium 2020 (ICS 2020), Tainan, 2020.
17. Zhi-Hao Wang, Sung-Tsun Shih, Hendrick, Mao-Yuan Pai and Gwo-Jiun Horng, "Deployment and Evaluation of LoRa Network Configuration Based on Random Forest," International Computer Symposium 2020 (ICS 2020), Tainan, 2020.
18. T. Chiang, M. Tung, H. Rick, D. Kurniadi, Z. Wang and G. Jong, "The Non-Contact Respiratory Monitoring System Using Thermal Image Processing," 2016 3rd International Conference on Green Technology and Sustainable Development (GTSD), Kaohsiung, 2016, pp. 86-92.
19. Zhi-Hao Wang, Gwo-Jiun Horng, Tz-Heng Hsu and Gwo-Jia Jong, "The Adaptive Feature Extraction Design of Heart Sound and Murmur by Using Convolution Neural Network," International Conference on Innovative Computing and Management Science (ICMS 2019), Osaka, Japan, 2019.
20. Zhi-Hao Wang and Gwo-Jiun Horng, "Implementation of Biological Signal Analysis System Based on IoT and Pulse Oximeter" International Automatic Control Conference (CACS 2019), Keelung, Taiwan, 2019.

Dissertation

1. Wang, Zhi-Hao (2020) The Bio-IoT System of Integrated Adaptive Transmission and PPG Signal Feature Analysis," Ph.D. Dissertation, National Kaohsiung University of Science and Technology

Patents

1. Ozone Sterilization Water Supply System and Method Thereof, LICENSE ID: I638783, 2018/10/21