

<b>姓名</b>			
王智昊			
<b>專長及研究領域</b>			
物聯網系統、生醫資訊系統、深度(機器)學習、機電整合、無線感測網路			
<b>學歷(大學以上學歷)</b>			
學歷	學校	國別	主修學門
博士	國立高雄科技大學	台灣	電子工程系(系統組)
學士	國立高雄應用科技大學	台灣	電子工程系(系統組)
<b>經歷</b>			
名稱		起迄日期	擔任工作
南臺科技大學	資訊管理系	2021/08~迄今	助理教授
州立巴東理工學院	資訊工程系	2021/02~2021/07	客座教授
國立高雄科技大學	模具工程系	2020/08~2021/05	顧問
恆晉機械股份有限公司		2020/01~2021/07	顧問
國立高雄科技大學	電子工程系	2019/01~2019/06	業師
全方衛保全股份有限公司	系統部	2016/06~2021/07	研發工程師
<b>榮譽與證照</b>			
<b>證照:</b>			
<ul style="list-style-type: none"> <li>● 勞動部-室內配線(屋內線路裝修)-丙級(007-101737)</li> <li>● 經濟部-電動車機電整合工程師-中級(A-E21-0014-2019)</li> </ul>			
<b>學術榮譽:</b>			
<ul style="list-style-type: none"> <li>● Best Paper- 2019 IEEE Eurasia Conference on Biomedical Engineering, Healthcare and Sustainability</li> <li>● Best Paper- 1st IEEE International Conference on Knowledge Innovation and Invention 2018</li> <li>● Best Paper-International Conference on Electrical, Electronic and Information Engineering (ICEEIE) 2017</li> </ul>			
<b>著作(近年)</b>			
<b>【SCI-Q1-Journal】</b>			
<ol style="list-style-type: none"> <li>1. H. Hendrick, R. Hidayat, G. -J. Horng and <b>Z. -H. Wang</b>, "Non-Invasive Method for Tuberculosis Exhaled Breath Classification Using Electronic Nose," in <i>IEEE Sensors Journal</i>, vol. 21, no. 9, pp. 11184-11191, 1 May1, 2021.</li> <li>2. <b>Zhi-Hao Wang</b>, 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 <i>Computers &amp; Electrical Engineering</i>, vol. 89, 2021.</li> <li>3. Aripriharta, <b>W. Z. Hao</b>, Muladi, G. -J. Horng and G. -J. Jong, "A New Bio-Inspired for Cooperative Data Transmission of IoT," in <i>IEEE Access</i>, vol. 8, pp. 161884-161893, 2020.</li> <li>4. <b>Z. Wang</b>, G. Horng, T. Hsu, C. Chen and G. Jong, "A Novel Facial Thermal Feature Extraction Method for Non-Contact Healthcare System," in <i>IEEE Access</i>, vol. 8, pp. 86545-86553, 2020.</li> <li>5. C. Lin, <b>Z. Wang*</b> and G. Jong, "A De-Identification Face Recognition Using Extracted Thermal Features Based on Deep Learning," in <i>IEEE Sensors Journal</i>, vol. 20, no. 16, pp. 9510-9517, 15 Aug.15, 2020.</li> </ol>			

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.
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-Q2-Journal】**

8. **Wang, Zhi-Hao**, et al. "A Prediction Method for Voltage and Lifetime of Lead–Acid Battery by Using Machine Learning," in *Energy Exploration & Exploitation*, vol. 38, no. 1, Jan. 2020, pp. 310–329.
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", in *J Supercomput*, vol. 76, pp. 8373–8390, 2019.

**【SCI-Q3-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*, vol. 114, pp. 711-729, 2020.

**【SCI-Q4-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, p. 2040129, 2020.

**【International 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.

**【EI-International Conference】**

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.

#### 【International Conference】

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.  
doi: 10.1109/GTSD.2016.30
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.

#### 計畫執行

計畫名稱	起訖日期	補助單位
使用人工智慧開發箱網養殖之水產養殖自動化 IoT 系統(OAC-NKUST-108-002)	2019.05.31~2019.12.05	海洋委員會

#### 指導學生情形(碩士生及大學專題生)

#### 主辦及參與會議

會議名稱	日期	角色	地點
International Computer Symposium 2020 (ICS 2020)	2020.12.17~2020.12.19	Presenter	Tainan, Taiwan
International Automatic Control Conference (CACS 2019)	2019.11.13~2019.11.16	Presenter	Keelung, Taiwan
2019 2nd International Conference on Applied Information Technology and Innovation (ICAITI)	2019.09.21~2019.09.22	Section Chair, Presenter	Bali, Indonesia
International Conference on Innovative Computing and Management Science (ICMS 2019)	2019.07.19~2019.07.22	Presenter	Osaka, Japan
2019 IEEE Eurasia Conference on Biomedical Engineering, Healthcare	2019.05.31~2019.06.03	Presenter	Okinawa, Japan

and Sustainability (ECBIOS)			
2018 International Conference on Applied Engineering (ICAE)	2018.10.3~2019.10.04	Presenter	Batam, Indonesia
2018 International Conference on Applied Information Technology and Innovation (ICAITI)	2018.09.04~2019.09.05	Presenter	Padang, Indonesia
2018 1st IEEE International Conference on Knowledge Innovation and Invention (ICKII)	2018.07.23~2018.07.27	Presenter	Jeju, South Korea
2018 IEEE International Conference on Applied System Invention (ICASI)	2018.04.13~2018.04.17	Presenter	Chiba, Japan
2017 5th International Conference on Electrical, Electronics and Information Engineering (ICEEIE)	2017.10.06~2017.10.08	Presenter	Malang, Indonesia
2016 3rd International Conference on Green Technology and Sustainable Development (GTSD)	2016.11.24~2016.11.25	Presenter	Kaohsiung, Taiwan