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- Education
  - Ph.D, EE, National Taiwan University of Science and Technology.
  - MS., National Taiwan University of Science and Technology.
- Teaching Experience
  - Assistant Professor, Department Electronic Engineering, Oriental Institute of Technology.
  - Assistant Professor, Department of Information Networking and System Administration, Ling-Tung University.
  - Instructor, Department of Commercial Management, Ling-Tung University.
- Practical Expertise-Certification(Selected)
  - Qualified Invigilator for Field Tests of Skills Certification in skill category of Network Construction Class B&C Technician, Ministry of Labor.
  - Microsoft Technology Associate: Networking Fundamentals, Microsoft.
  - Microsoft Certified Professional, Microsoft.
  - Foundation Certificate in EPC Architecture Framework, EPCglobal.
  - Internet and Computing Core Certifications (IC3), Certiport.
- Academic Services(Selected)
  - Member, IEEE
  - Member, IEICE
- Research(Research Projects、Research Outcomes、Publications、Internal Research)
  - **Research Projects(Selected)**
    - "A ventilator monitoring system based on mobile devices," National Science Council Research Project, NSC 101-2218-E-275 -001, 2012/10/01-2013/09/30.
  - **Research Outcomes-Patent**
    - **Huai-Kuei Wu**, Pei-Ling Tsai, Chun-Hung Tsai, You-Tai Shen, "Visible Light Transmitting System Used to Transmit Wireless Network Information," R.O.C. Patent M584071, September, 21, 2019.
    - **Huai-Kuei Wu**, "Position Tracking System," R.O.C. Patent M549416, September, 21, 2017.
    - **Huai-Kuei Wu**, "System for Configuring Electronic Equipment Using Visible Light, Electronic Equipment and User Equipment," R.O.C. Patent I600287, September, 21, 2017.

- **Huai-Kuei Wu**, "Data Broadcasting System Using Visible Light, Signal Transmitting Apparatus and Apparatus for Receiving Visible Light," R.O.C. Patent I586178, June, 1, 2017.
- **Huai-Kuei Wu**, "System for Configuring Electronic Equipment Using Visible Light, Electronic Equipment and User Equipment," R.O.C. Patent M512677, January, 21, 2016.
- **Huai-Kuei Wu**, "Data Broadcasting System, Signal Transmitting Device and Data Receiving Device Using Power Line Communication," R.O.C. Patent M507119, August, 11, 2015.
- **Huai-Kuei Wu**, Tzu-Hung Lin, Yi-Syun-Lin, Shih-Hao Kuo, Chi-Chu Lin, Sin-Hao Wang, "Controlling Device and Visible Light Signal Receiving Device," R.O.C. Patent M509485, September, 21, 2015.
- **Huai-Kuei Wu**, "Data Broadcasting System Using Visible Light, Signal Transmitting Apparatus and Apparatus for Receiving Visible Light," R.O.C. Patent M502229, June, 1, 2015.
- **Huai-Kuei Wu**, "Electronic Medicine Kit with Medication Notification and Confirmation," R.O.C. Patent M495849, February, 21, 2015.

■ **Publications-Journal**

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- Bih-Hwang Lee, Eppy Yundra, M. , **Huai-Kuei Wu** and Udin Harun Al Rasyid, "Analysis of Superframe Duration Adjustment Scheme for IEEE 802.15.4 Networks," *EURASIP Journal on Wireless Communications and Networking*, doi:10.1186/ s13638-015-0296-3, Apr. 2015. (SCI)
- Jhih-Ming Chen and **Huai-Kuei Wu**, "A Study of Cloud based Sport Management System with Interactive and Community Incorporate," *Ling-Tung Journal*, Vol. 36, Dec. 2014. (Corresponding author)
- Hung-Chi Chien, Bih-Hwang Lee, **Huai-Kuei Wu**, Wen-Pin Hsu and Hsin-Hung Hsieh, "A dynamic adjustable contention period mechanism and adaptive backoff process to improve the performance for multichannel mesh deterministic access in wireless mesh LAN," *EURASIP Journal on Wireless Communications and Networking*, doi:10.1186/1687-1499-2014-149, Sept. 2014. (SCI)
- Bih-Hwang Lee, M. Udin Harun Al Rasyid and **Huai-Kuei Wu**, "Analysis of Superframe Adjustment and Beacon Transmission for IEEE 802.15.4 Cluster

Tree Networks," *EURASIP Journal on Wireless Communications and Networking*, doi:10.1186/1687-1499-2012-219, Jul. 2012. (SCI)

■ Publications-Conference

- **Huai-Kuei Wu**, Jin-Wei Kang, Jie-Cheng Yang, Bo-Cheng Wu and Zhi-Min Tang, "Implementation of Visible Light Communication System with Auto Gain Control," *in proceedings of IEEE 8th Global Conference on Consumer Electronics*, Oct. 15-18, 2019.

- 吳槐桂，李岱融，蔡佩琳，蔡博皓，邱浩睿，"Development of WLAN Authentication System Based on Visible Light Communication Technology," *in proceedings of Internal Conternece of Information Technology and Industrial Application*, Apr. 26, 2019.

- **Huai-Kuei Wu**, Shui-Tian Wu, Zheng-Hao Huang and Chun-En Lee, "Development of a patient turnover remind system based on the variation of skin impedance," *in proceedings of IEEE 7th Global Conference on Consumer Electronics*, Oct. 7-12, 2018.

- **Huai-Kuei Wu**, Tei-Wei Hung, Ssu-Han Wang and Jian-Wen Wang, "Development of a Shoe-based dementia patient tracking and rescue system," *in proceedings of 4th IEEE International Conference on Applied System Innovation*, Apr. 13-17, 2018.

- Bih-Hwang Lee, **Huai-Kuei Wu** and Neng-Chun Yu, "A Priority Based Algorithm for Adaptive Superframe Adjustment and GTS Allocation (PASAGA) in IEEE 802.15.4 LR-WAN," *in proceedings of 4th IEEE International Conference on Applied System Innovation*, Apr. 13-17, 2018.

- Su-Shun Huang, Hsin-Hung Hsieh, **Huai-Kuei Wu**, Chih-Hau Tseng and Bih-Hwang Lee, "A Token-Based Rewarding Mechanism for Relaying D2D Traffic in LTE-A," *in proceedings of 2018 International Conference on Smart Science*, Mar. 30-Apr. 2, 2018.

- 白芮源, **吳槐桂**, "智慧電風扇," *2017 年民生電子學術研討會*, 國立臺北科技大學, Nov. 18, 2017.

- **Huai-Kuei Wu**, Neng-Chun Yu and Chia-Ho Tsai, "The Development of a Sport Management and Feedback System for the Healthcare of the Elderly," *in proceedings of IEEE International Conference on Consumer Electronics-Taiwan*, Jun. 12-14, 2017.

- **Huai-Kuei Wu**, Kuan-Yu Lin, Pang-Hsing Liu, Tei-Wei Hung, Zhi-Yu Xiao, Jyun-Yuan Chen, Rong-Xiang Lai, Wei-Xiang Wang, Yu-Pei Wang and Zhe-Wei Ye, "Development of an Exercise Management Platform for the Elderly," *in proceedings of IEEE International Conference on Consumer Electronics-Taiwan*, Jun. 12-14, 2017.

- **吳槐桂**, 蕭志宇、洪得維, "基於可見光通訊技術之資料傳輸系統開發," *工程科技應用研討會*, 臺北城市科技大學, Jun. 19, 2017.

- Hsin-Hung Hsieh, Bih-Hwang Lee, **Huai-Kuei Wu**, Wen-Pin Hsu and Hung-Chi Chien, "Study on using Design Patterns to Implement a Simulation System for WiMAX Network," *in Proceedings of 31st International Technical Conference on Circuits/Systems, Computers and Communications*, pp. 13-16, Jul. 10-13, 2016.

- Bih-Hwang Lee, Hsin-Hung Hsieh, **Huai-Kuei Wu**, Hung-Chi Chien and Wen-Pin Hsu, "An Enhanced Autonomous Component Carrier Selection Method for HeNB in LTE-A Nertworks," *in Proceedings of 31st International Technical Conference on Circuits/Systems, Computers and Communications*, pp. 13-16, Jul. 10-13, 2016.

- **吳槐桂**, 謝淑玲, 賴忠泰, 徐世樺, 謝昀宸, 張峻瑋, 古旻哲, "可見光生理資料傳輸," *工程科技應用研討會*, 臺北城市科技大學, Jun. 3, 2016.

- **Huai-Kuei Wu** and Tzu-Hung Lin, "Development of a Time Synchronization System Based on Visible Light Communication," *in proceedings of IEEE 4th Global Conference on Consumer Electronics*, Oct. 27-30, 2015.

- Bih-Hwang Lee, Eppy Yundra, **Huai-Kuei Wu** and M. Udin Harun Al Rasyid, "Analysis of Superframe Duration Adjustment Scheme for IEEE 802.15.4 Networks," *in proceedings of 7th International Conference on Ubiquitous and Future Networks*, Jul. 7-10, 2015.

- **吳槐桂**, 彭雅鈴, 林宗毅, 游騰圳, 陳志昇, 戴亨諭, "使用可見光傳輸技術之節能插座開發," *2015 資訊管理實務研討會*, 健行科技大學, May. 15, 2015.

- **吳槐桂**, 楊宜倫, 陳佳明, 黃彥迪, 陳盈助, "具備份功能之無線傳輸行車記錄器開發," *2015 資訊管理實務研討會*, 健行科技大學, May. 15, 2015.

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- **吳槐桂**, 葉奕麟, 江雨涵, "LED看板監測管理平台建置," *2014 資訊管理實務研討會*, 健行科技大學, May. 23, 2014.

- Bih-Hwang Lee, Meng-Dung Weng and **Huai-Kuei Wu**, "A Novel Price-based Algorithm for Spectrum Sharing in Cognitive Radio Networks," *in Proceedings of 79th IEEE Vehicular Technology Conference*, May. 18-21, 2014.

- 吳槐桂, 徐健易, 黃百傳, 彭正傑, 江承洋, "以 ZigBee 為基礎之低價位生理參數收集裝置," *2013 年網路及資訊安全研討會*, 健行科技大學, Jun. 14, 2013.
- 吳槐桂, 賴永勝, 康志偉, 周奕瑩, 曾婉菱, "行動裝置網路記帳平台建置," *2013 年網路及資訊安全研討會*, 健行科技大學, Jun. 14, 2013.
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- M. Udin Al Rasyid, Bih-Hwang Lee and **Huai-Kuei Wu**, "ESA: Efficient Superframe Algorithm for IEEE 802.15.4 Wireless Sensor Networks," *in Proceedings of 14th Industrial Electronics Seminar*, pp. 88-93, Oct. 24, 2012.
- Bih-Hwang Lee, Hung-Chi Chien and **Huai-Kuei Wu**, "Study on Multi-Channel Deterministic Access for Wireless Mesh LAN," *in Proceedings of 2nd IEEE International Conference on Cyber Technology in Automation, Control, and Intelligent Systems*, pp. 39-42, May 27-31, 2012.
- **Huai-Kuei Wu**, Bih-Hwang Lee and M. Udin Al Rasyid, "Study on Superframe Adjustment for Cluster Tree in Wireless Sensor Networks," *in Proceedings of 2nd IEEE International Conference on Cyber Technology in Automation, Control, and Intelligent Systems*, pp. 43-47, May 27-31, 2012.
- **Huai-Kuei Wu**, M. Udin Al Rasyid and Bih-Hwang Lee, "Study on Superframe Adjustment and Beacon Transmission for Cluster Tree Networks," *in Proceedings of 26th International Technical Conference on Circuits/Systems, Computers and Communications*, pp. 750-753, Jun. 19-22, 2011.

■ Internal Research
  - Academic-industry Cooperation
■ Research Projects**(Selected)**
  - "Development of a dementia symptoms management system integrated with home interaction and location tracking functions," MOST Academia-Industry Research Project, MOST 108-2622-E-161 -001 -CC3, 2019/06/01-2020/05/31.
  - "The development of a memory evaluation and retrospective system for the elderly with dementia," MOST Academia-Industry Research Project, MOST 106-2622-E- 161- 002 -CC3, 2017/06/01-2018/05/31.
  - "The development of a sport management and feedback system for the healthcare of the elderly," MOST Academia-Industry Research Project, MOST 104-2622-E-275- 001 -CC3, 2015/06/01-2016/05/31.