## **Curriculum Vitae**

### Name: Ts. Dr. Alan Ting Huong Yong

### List of Research:

#### **Internal Grant**

- 1. UCTS Spraying Drone for Disinfection and Cleaning Activities (3/2021/02)
- A Severity Diagnostic System for Knee Osteoarthrities using Microsoft Kinect V2 (2/2018/11)
- 3D Athlete Body Reconstruction and Measurement using Kinect Sensor (4/2016/08)
- 4. Virtual Badminton Coaching using Markerless Human Motion-Biometric Analysis System (2/2016/03)

### **External Grant**

- A Proof-of-Concept Study of Using Microsoft Xbox One Kinect (Kinect V2) to Diagnose the Stages of Knee Osteoarthritis (Ministry of Health Malaysia) – Oct 2018 – Oct 2019
- 2. The Study of Using Automatic Dependent Surveillance-Broadcast Technology for Infrastructure (SDEC) – Oct 2018 – Dec 2020
- 3. Behavioural Analytics and Real-time Tracking of Patients Using IoT and RFID (Asia-Pacific Telecommunity) Jan 2021 Dec 2021

4. Child Developmental Screening Mobile App (Brimedic Sdn. Bhd.) – Jan 2021 – Dec 2022

#### List of Consultancy:

- 1. Pedagogy Training (University College of Technology Sarawak), Feb 2019
- 2. Pedagogy Training (University College of Technology Sarawak), Aug 2020
- 3. Pedagogy Training (University College of Technology Sarawak), Sept 2021
- Website Workshop for UCTS Foundation Student (University College of Technology Sarawak), Nov 2017
- Hour of Code Event 2017 (University College of Technology Sarawak), Nov 2017
- 6. Programming and Mobile App Workshop (SMK Tung Hua, Sibu), Mar 2019 – May 2019

### List of Publications:

- Ting, H. Y., Sim, K. S., and Abas, F. S. (2017). Adaptive Log-Covariance Quaternions-Based Human Action Recognition System Using RGB-D Sensor. World Applied Sciences Journal, 35(8), 1325-1330
- Tan, D. Y. W., Ting, H. Y., and Lau, S. B. Y. (2017). On-court Holistic Badminton Training Analytics Framework. World Applied Sciences Journal, 35(8), 1331-1336
- Ting, H. Y. and Tan, D. Y. W. (2017). Badminton Stroke Movement Comparison Using Kinect-Based Adaptive Range of Movement Index Technique. Indian Journal of Science and Technology, 10(39), 1-5

- Tan, D. Y. W. and Ting, H. Y. (2017). Kinect-based Badminton Motion Sensor as Potential Aid for Coaching Strokes in Novice Level. Indian Journal of Science and Technology, 10(39), 1-5
- Lau, S. B. Y., Ting, H. Y., and Tan, D. Y. W. (2018). Cost-Benefit Analysis Reference Framework for Human Motion Capture and Analysis Systems. Advanced Science Letters, 24(2), 1249-1253(5)
- Ting, J. T. W., Ting, H. Y., Tan, D. W. Y. and Yong, C. Y. (2019). Kinect-Based Badminton Motion Analysis Using Intelligent Adaptive Range of Movement Index. IOP Conf. Series: Materials Science and Engineering, 495 012017
- Yiiong, S. P., Ting, H. Y., Tan, D. W. Y. and Chia, R. (2019). Investigation of Relation Between Sport's Motion and Heart Rate Variability (HRV) Based on Biometric Parameters. IOP Conf. Series: Materials Science and Engineering, 495 012015
- Ting, H. Y. and Tang, K. W. W. (2019). Determination of Sarawak's Brinjal Maturity Using Colour Image Processing Technique. Borneo Journal of Sciences and Technology, 1(2), 32-38
- Lau, I. Y. S., Ting, H. Y. and Toh, T. H. (2021). The Validity of the Microsoft Kinect for Healthy Participants : A Short Review. Borneo Journal of Sciences and Technology, 3(1), 21-28
- 10. Ting, H. Y., Sim. Y. W., Tay, Y. P. and Wong, E. K. S. (2021). A Universal Traffic Management System for Unmanned Aerial Systems with Or Without Automatic Dependent Surveillance-Broadcast. International Journal of Advanced Research in Technology and Innovation, 3(1), 11-18

- 11. Wang, K., Khoo, K. S., Leong, H. Y., Nagarajan, D., Chew, K. W., Ting, H. Y., Selvarajoo, A., Chang, J. S. and Show, P. L. (In Press). How does the Internet of Things (IoT) help in microalgae biorefinery? Biotechnology Advances
- 12. Peter, A. P., Chew, K. W., Koyande, A. K., Sia, Y. H., Ting, H. Y., Rajendran, S., Halimatul Munawaroh, H. S., Yoo, C. K. and Show, P. L. (2021). Cultivation of Chlorella vulgaris on Dairy Waste using Vision Imaging for Biomass Growth Monitoring. Bioresource Technology, 341(125892)
- 13. Ting, H. Y. and Tan, D. W. Y. (2017). Preliminary Investigation of Movement-Heart Rate Relationship Using Kinect-Based Badminton Performance Analysis. International Conference on Robotics, Automation and Sciences (ICORAS) 2017
- 14. Ting, H. Y., Wong, P., Pao, D. K. W. and Hii, S. L. (2018). Vision-based Estimation System for Total Phenolic Content in Honey. The National Conference on Agricultural and Food Mechanization 2018 (NCAFM 2018), 108-110
- 15. Ting, J. T. W., Ting, H. Y., Tan, D. W. Y. and Yong, C. Y. (2018). Kinect-Based Badminton Motion Analysis Using Intelligent Adaptive Range of Movement Index. The 11th Curtin University Technology, Science and Engineering (CUTSE) International Conference
- 16. Yiiong, S. P., Ting, H. Y., Tan, D. W. Y. and Chia, R. (2018). Investigation of Relation Between Sport's Motion and Heart Rate Variability (HRV) Based on Biometric Parameters. The 11th Curtin University Technology, Science and Engineering (CUTSE) International Conference

- 17. Ting, H. Y. and Tang, K. W. W. (2018). Determination of Sarawak's Brinjal Maturity Using Colour Image Processing Technique. International Heritage and Cultural Conservation Conference (InHerit 2018)
- Lau, I. Y. S., Chua, T. T., Lee, W. X. P., Wong, C. W., Toh, T. H. and Ting, H. Y. (2020). Kinect Based Knee Osteoarthritis Gait Analysis System. 2020 IEEE 2nd International Conference on Artificial Intelligence in Engineering and Technology (IICAIET), 1-6
- 19. Ting, H. Y., Sim. Y. W., Tay, Y. P. and Wong, E. K. S. (2021). A Universal Traffic Management System for Unmanned Aerial Systems with Or Without Automatic Dependent Surveillance-Broadcast. 2nd International Conference on Business, Education, Social and Technology 2021, 1-6
- 20. Saleh, M. A., Ting, H. Y., Mohamed, N. N. and Almisred, A. A. (2021). Blockchain Applications in Supply Chain: Platform Selection and Literary Analysis. 2021 IEEE 2nd International Conference on Artificial Intelligence in Engineering and Technology (IICAIET)

# List of Awards:

- Bronze Award (Malaysian Association of Research Scientists (MARS), Malaysia) – 2018
- 2. ITEX Silver Medal (Malaysian Invention and Design Society (MINDS), Malaysia) – 2018
- 3. Gold Award (Malaysian Association of Research Scientists (MARS), Malaysia), 2019
- ITEX Silver Medal (Malaysian Invention and Design Society (MINDS), Malaysia) – 2019