Prof. LO Wai Lun (PI)

(i) Academic qualifications

Nov 1991 -BEng in Electrical Engg. (2nd Class Div 1), (HKPolyU)
Nov 1996 - Doctor of Philosophy (Thesis title: Self-tuning Process Control Algorithms)
Dept. of Electrical Engg (EE), HKPolyU, Hung Hum, Kowloon, HK

(ii) Previous academic positions held

6/1996-6/1997 - Research Assistant, EE Dept., Control & Computing Group (6/1996-11/1996), HKPolyU. Research Associate in EE Dept. (12/1996-6/1997).
6/1997-6/1999-Post-doctoral Research Fellow, EE Dept., HKPolyU.
6/1999-9/1999-Research Fellow, Electronic Engg Dept., CityUHK
9/1999-9/2002-Assistant Professor, Acting Head, Computer Science (CS) Dept. (9/2000-9/2001), Head, CS Dept. (9/2001-9/2002), Chu Hai College
1/2002-6/2005 - Part-time Research Fellow (Project Advisor: Prof. A.B.Rad, *"Intelligent Control of Complex non-linear systems via Neural Network"* (1/2002-2/2005)*, "On-Line Genetic Algorithms"*(1/2002-2/2005), EE Dept., HKPolyU.
9/2002-9/2008 - Associate Professor, Head, CS Dept., Chu Hai College

(iii) Present academic position(s) (with date(s))
9/2008-Present - Professor, Head of CS Dept., Chu Hai College of Higher Education
9/2018-Present-Associate Dean, Faculty of Science & Engg, CHCHE
12/2022-11/2024-Honorary Professor in Restorative Dental Science, Faculty of Dentistry, HKU
7/2011-Present-Advisor, Centre for Smart Energy Conversion & Utilization Research, CityUHK.
8/2019-Present-IEEE Senior Member (10 Aug 2019)

(iv) Previous relevant research work
Control theory, computer vision, machine learning, applications of AI in power electronics systems. H-Index 21, 46 journals+38 Conference+5 Book chapters=89

(v)Others - Funded Research Project

1. Automatic multiple level gum disease detection based on deep neural network: algorithm and system, (UGC/FDS13/E01/22), Dr. HSUNG Tai-Chiu (PI), Dr. LAM Yu-Hang (Co-I), **Prof. LO Wai-Lun (Co-Investogator)** 36 months, $1,181,781
2. Truthful Mechanism Design for Facility Location Game with Agents' Migration Scheme, **Prof. LO Wai-lun (Principal Investigator),** Dr. Fong Chi Kit (Co-Investigator), Dr Vincent Chau (Co- Investigator), Dr Hau Chan (Co- Investigator), UGC/FDS13/E01/20, 30 months, $1,012,003 (1 Aug 2022-30 Jun 2023).
3. Photovoltaic Panel Model Parameters Estimation and Monitoring by Using Artificial Neural Network, **Prof LO Wai-lun (Principal Investigator),** Prof. Henry S.H.Chung (Co-I), Dr. Richard T.C.Hsung, UGC/FDS13/E01/21, (Jan 2022-Dec 2025) 36 months, HK$ 914,925.
4. Extended Reality on Smart Transport and Logistics: Embracing Innovative Theories and Technologies for Enhancing Operational Resilience and Efficiency, Dr WONG Eugene Yin-cheung (Principal Investigator), **Prof. LO, Wai Lun (Co-Principal Investigator),** UGC/IIDS14/B01/21, (Jan 2022-Dec 2022) 12 months, HK$ 544,548.
5. Building Envelope Environmental Performance Optimization Teaching Platform (BEEP), Dr. Ruffina Thilakaratne (Principal Investigator, CHCHE), **Prof. Wai Lun LO (Co-Investigator),** Mr. C.H.Kay (Co-Investigator, CHCHE), 01/QESS/2021, Quality Enhancement Support Scheme (QESS) under Self-financing Post-Secondary Education Fund, $1,986,463,

(01/09/2021- 31/8/2024)

6. Development of real-time cooperative VR multi-CAVE systems for collaborative and team learning, Dr. Eugene Y.C.WONG (Principal Investigator, HSU), **Prof. Wai Lun LO (Co-Principal Investigator, CHCHE),** Mr. Dennis K. H. Wong (Co-Principal Investigator, HKSPACE), T02/QESS/2020, Quality Enhancement Support Scheme (QESS) under Self-financing Post-Secondary Education Fund, $8,955,000, ($2,739,167 run by CHCHE) (01/12/2020 - 30/11/2023)

7. Meteorological Visibility Estimation by using Particle Swarm Optimization and Neural Network, UGC/FDS13/E02/18, **Prof. W.L.LO (Principal Investigator)**, Dr. HONG FU (Co-Investigator), Jan 2019-Dec 2020, 24 months, HK$ 580,275.

8. Intelligent assessment of Attention Deficit Hyperactivity Disorder (ADHD) based on gaze-posture-movement tracking fusion: principle, algorithm and system, UGC/FDS13/E04/18, Dr. Hong FU (Principal Investigator), **Prof. W.L.LO (Co-Investigator)**, Research Grant Committee, Hong Kong, Jan 2019-Jun 2020, HK$ 937,350.

9. Automatic stimulus and synchronous pupil-iris-head tracking for intelligent assessment of strabismus: principle, algorithm and system Dr. Hong FU (Principal Investigator), **Prof. W.L.LO (Co-Investigator)**, FDS RGC Hong Kong, UGC/FDS13/E01/17, HK$ 655,600, Jan 2018- Jun 2020)

10. Development of Virtual Reality Teaching Tools for Science and Engineering Education, **Prof. W.L.LO (Principal-Investigator),** Dr. Hong FU (Co-Investigator), 01/QESS/2017, Quality Enhancement Support Scheme (QESS) under Self-financing Post-Secondary Education Fund, HK$ 1,778,000, Dec 2017 – Nov 2019, 2 Years)

11. Digitalized Assessment Developmental Coordination Disorder with Integrated Eye-Motion Tracking Technology: System and Algorithms, Dr. Hong FU (Principal Investigator), **Prof. W.L.LO (Co-Investigator)**, FDS RGC Hong Kong, UGC/FDS13/E02/16, HK$ 1,035,675, 01 January 2017 - 31 December 2019)

12. Workshop Series in Data Science and Machine Learning Applications **Prof. W.L.LO (Principal Investigator)**, Dr. HONG FU (Co-Investigator), IIDS RGC Hong Kong, UGC/IIDS13/E02/16, HK$ 269,200, 01 October 2016 - 31 September 2017)

13. A Visual Platform for the Design, Implementation, and Analysis of Collaborative Business Simulation Games (**Prof. W.L.LO, Co-Investigator,** T01/QESS/2015, Quality Enhancement Support Scheme (QESS) under Self-financing Post-Secondary Education Fund Collaborate with Hang Seng Management College and Hong Kong Shue Yan University, HK$ 6,600,140 and HK$990,000 run by CHCHE, Nov 2015 – Nov 2018, 3 Years)

14. Eye-tracking Aided Digital System for Intelligent Strabismus Diagnosis and Therapy Training: Dr. Hong FU (Principal Investigator), **Prof. W.L.LO (Co-Investigator)**, FDS RGC Hong Kong, UGC/FDS13/E04/14, HK$ 952,430, 01 October 2014 - 31 September 2017)

15. Programme for the Enhancement of Research Capacity in Sustainable Systems and Technologies, **Prof. W.L.LO, Co-Investigator, Research Group Leader** of Department of Computer Science, RGC IDS Hong Kong, UGC/IDS13/14, HK$13,767,934, 01 January 2015 - 31 December 2017)

Awards

16. **Excellent paper**, the 2016 9thInternational Conference on Advanced Computer Theory and Engineering (ICACTE 2016), Hong Kong, August 19-21, 2016.
Winning paper: "Eye-tracking Aided Digital Training System for Strabismus Therapy".
Authors: Z. Liang, H. Fu, B. Xu and W. L. LO

17. **Best paper presentation**, ICACTE 2019, "Meteorology Visibility Estimation by using Multi-Support Vector Regression Method", *Wai Lun LO, Meimei ZHU and Hong FU, Sep 2019, Jakarta, Indonesia

18. **Outstanding Research Award**, Chu Hai College of Higher Education, 2018-2019

Conference Publications

[1]   A.B.Rad, **W.L.LO** (1992): "On Continuous Time Predictive PI Controller", Proceedings, 2nd International Conference on Automation, Robotics, & Computer Vision (ICARCV' 92), Singapore, September 1992, Vol. 2 of 3, pp. Co. 14.5.1.

[2]   A.B.Rad, **W.L.LO** (1993): "Auto-Tuning of Predictive PI Controller", Proceedings of International Conference in Applied Modelling & Simulation, Vancouver, Canada, July 1993, pp.26-29

[3]   K.M.Tsang, A.B. Rad and **W.L.LO** (1995): "On-line tuning of delay compensated PID controllers", IEEE Singapore International conference on intelligent control & Instrumentation (IEEE SICICI' 95), Singapore, July, pp. 296-300.

[4]   K.M.Tsang, **W.L.LO** and A.B.Rad (1998): "Frequency Testing and Low-order Modeling by relay oscillation method", IASTED International conference on Applied Modeling and Simulation, August, Honolulu, Hawaii, USA, pp. 61-65.

[5]   K.M.Tsang, **W.L.LO** and A.B.Rad (1998): "Enhanced Relay auto-tuning method", 5th Symposium of dynamics and control of process systems (DYCOPS-5), Corfu, GREECE, June. pp. 566-571.

[6]   A.B. Rad, **W.L. LO**, and K.M. Tsang (2000): "Adaptive time delay controller" International Symposium on Advanced Control of Chemical Processes" PISA, Italy, June 14-16, 2000.

[7]   C.H.LO, Y.K.Wong, A.B.Rad, **W.L.LO** (2000): "Supervisory Intelligent Qualitative Controller", 6th International Conference on Soft-computing, IIZUKA, Fukuoka, Japan, October 1-4, 2000.

[8]   K.M.Chow, A.B.Rad, Y.L.Ip, P.T.Chan, K.M.Tsang, **W.L.LO** (2000): "An Enhanced Table Look-up Scheme based on Combining Information of De-coupled Fuzzy Set", 6th International Conference on Soft-computing, IIZUKA, Fukuoka, Japan, October 1-4, 2000.

[9]   J.Zhang, S.H.Chung, **W.L.LO**, Ron, S.Y.Hui (2000): "De-coupled Optimization for design of switching regulator using genetic algorithm", IEEE Symposium on Circuit & Systems, Geneva, Swissland, May 2000.

[10]   **W.L.LO**, A.B.Rad (2001): "Continuous Self-tuning Control of Time Delay System", 6th Symposium of dynamics and control of process systems (DYCOPS-6), Korea, CHEJU, June 2001.

[11]   **W.L.LO**, A.B.Rad (2001): "Adaptive Multi-class Controller", 2001 IEEE Conference on Control, Applications (CCA) and the International Symposium on Intelligent Control (ISIC), MEXICO City, pp. 18-23, Sep. 2001.

[12]   H.F. Ho, Y.K. Wong, A.B. Rad and **W.L.LO** (2001): "Fuzzy Predictive Controller", ISATED International Conference CONTROL AND APPLICATIONS, Banff, CANADA, June 2001.

[13]   Ho, HF, Rad, AB, Wong, YK, **LO, W L** (2004): "On-line lower order modeling using fuzzy systems", IFAC 7th International Symposium on Advanced Control of Chemical Processes, ADCHEM, Hong Kong, 11-14 January 2004

[14]   B.M.T. Ho, H. Chung, and **W.L.LO**, (2004) "Use of System Oscillation to Locate the MPP of PV Panels," in Proc. IEEE Power Electron. Spec. Conf., Aachen, Germany, June 2004, Vol. 3, pp. 1976-1982.

[15]   X. M. Ren, A. B. Rad, **W.L. LO**, and P. T. Chan (2005): "Adaptive H2 optimal control based on Smith predictor for continuous-time systems with unknown time delay", 2005 International Conference on Control and Automation (ICCA2005), June 27-29, 2005, Budapest, Hungary, pp. 159-164

[16]   X. M. Ren, A. B. Rad, **W. L. LO** and P. T. Chan (2005): "Adaptive Internal Model Control with Reference Input Predictor for Time Delay Systems", 16th IFAC World Congress, Praha 3-8 July 2005.

[17] Jun ZHANG, Henry Chung and **Alan LO,** Tao Huang (2008):"Optimization of Power Electronic Circuits Using Ant Colony System with Adaptive Orthogonal Tolerance Analysis", PESC'2008-IEEE 39thPower Electronics Specialists Conference, June 15-19, 2008, Greece

[18] Victor S. P. Cheung, Henry S. H. Chung, and **Alan W.L. LO** (2010):"Derivation of a Nonlinear Output Capacitor Current Programming Technique Applicable for a Buck Converter Operating in CCM and DCM", In Proceedings of IEEE Energy Conversion Congress & Exposition 2010, Atlanta, GA, Sep 12-16,2010, pp.1979-1986,

[19] Victor S. P. Cheung, Henry S. H. Chung, and **Alan W.L. LO** (2010): "Investigation of the Steady-State and Dynamic Characteristics of a Buck converter with Nonlinear Output Capacitor Current Programming", In Proceedings of IEEE Energy Conversion Congress & Exposition 2010, Atlanta, GA, Sep 12-16, 2010, pp.3107-3114

[20] Victor S. P. Cheung, Henry S. H. Chung, Ke-wei Wang, and **Alan W.L. LO** (2013): "Multi-Parallel-Connected Static Synchronous Series Compensators", In Proceedings of IEEE Applied Power Electronics Conference and Exposition 2013, Long Beach, CA, March 17-21, 2013, pp. 569-576

[21] Victor S. P. Cheung, Henry S. H. Chung, Ke-wei Wang, and **Alan W.L. LO** (2013): "Modeling and Design of Multi-Parallel-Connected Static Synchronous Series Compensators with Daisy-Chained Transformers" In Proceedings of IEEE Energy Conversion Congress & Exposition 2013, Denver, CO, Sep 15-19, 2013, pp.5240-5247

[22] Victor S. P. Cheung, Henry S. H. Chung, and **Alan W.L. LO** (2014): "Phase Jump Technique for Minimization of Load Voltage Transients in SSSC-Based Voltage Regulator", In Proceedings of IEEE Applied Power Electronics Conference and Exposition 2014, Forth Worth, TX, March 16-20, 2014

[23] Wenguan WANG, Alex Chun-for LIU, Henry Shu-hung CHUNG, Ricky Wing-hong LAU, Jun ZHANG, **Alan Wai-lun LO**, (2015): "Fault Diagnostic Device for Photovoltaic Panels," in proceedings of the Applied Power Electronics Conference and Exposition (APEC 2015), Charlotte, NC, March 15 - 19, 2015

[24] Z. Chen, H. Fu, **W. L. LO,** and Z. Chi, "Eye-tracking Aided Digital System for Strabismus Diagnosis," Proceedings of the 2015 IEEE International Conference on Systems, Man, and Cybernetics, pp. 2305-2309, Hong Kong, Oct., 2015.

[25] T. Shen, H. Fu, J. Chen, W. Yu, C. Lau, **W.L.LO** and Z. Chi, "Facial Expression Recognition Using Depth Map Estimation of Light Field Camera", to appear in the IEEE International Conference on Signal Processing, Communications and Computing (ICSPCC2016).

[26] S.Y. Li, H. Fu, B.G. Xu, **W.L. LO** and K. Kay, "Extraocular muscle modeling for eye movements with eye tracking aided strabismus diagnosis data using finite element method", the 12th International Conference on Intelligent Unmanned Systems (ICIUS 2016) and the Workshop of the Eye Tracking and Visual Intelligence 2016 (ETVI 2016), Xian, China, Aug 23-25, 2016

[27] Z. Liang, H. Fu, B. Xu and **W. L. LO,** "Eye-tracking Aided Digital Training System for Strabismus Therapy", 2016 9th International Conference on Advanced Computer Theory and Engineering (ICACTE 2016), Hong Kong, August 19-21, 2016.

[28] S. Y. Li, B. Li, S. Zhang, H. Fu, **W. L. LO**, J. Yu, C. Sit and R. Li, "A Markerless Visual-motor Tracking System for Behavior Monitoring in DCD Assessment", APSIPA ASC 2017, Kuala Lumpur, Malaysia, 12-15 Dec. 2017.

[29] S. Y. Li, H. Fu and **W. L. LO**, "Meteorological Visibility Evaluation on Webcam Weather Image using Deep Learning Features", The 10th International Conference on Advanced Computer Theory and Engineering (ICACTE 2017), Jeju Island, South Korea, August 10-13, 2017.This paper will also be published on International Journal of Computer Theory and Engineering (IJCTE).

[30] Wenguan Wang, Henry Shu-hung Chung, Ralph Cheng, Chi-Sing Leung, Xiaoqing Zhan, **Alan Wai-lun LO**, James Kwok, Chun Jason Xue and Jun Zhang, "Training Neural-Network-Based Controller on Distributed Machine Learning Platform for Power Electronics Systems",

IEEE Energy Conversion Congress and Exposition 2017.

[31] Sui Pung Cheung, Shun Cheung Yeung, Shu Hung Chung, **Wai Lun LO** and Weimin Wu : "A Transformer-less Unified Power Quality Conditioner Having Fast Dynamic Control", IEEE Energy Conversion Congress and Exposition 2017.

[32] Y. Zheng, H. Fu, B. LI, **Wai-Lun LO**, D. WEN, "An Automatic Stimulus and Synchronous Tracking System for Strabismus Assessment Based on Cover Test", ICIIBMS 2018, Bangkok, Thailand, Oct. 2018.

[33] Martin Garaj, Kelvin Yiwen Hong, Henry Shu-Hung Chung, Jianfeng Zhou, **Alan Wai-Lun LO**: "Photovoltaic Panel Health Diagnostic System for Solar Power Plants", 34th Annual IEEE Applied Power Electronics Conference and Exposition, Mar 2019.

[34] Martin Garaj, Shu-hung Henry Chung, **Alan Wai-lun Lo** and Huai Wang,"Analysis of solar panel's lumped equivalent circuit parameters using LASSO", The 2019 IEEE Energy Conversion Congress and Exposition, Sep 2019, pp. 3427-3432.

[35] **Wai Lun LO**, Meimei ZHU and Hong FU: "Meteorological Visibility Estimation by using Multi-Support Vector Regression Method", The 12th International Conference on Advanced Computer Theory and Engineering (ICACTE 2019), JARKATA, Indonesia, 18-22 Sep 2019.

[36] Chongkai Lu, Ruimin Li, Hong Fu, Bin Fu, **Wai-Lun LO**, and Zheru Chi: "Precise Temporal Action Localization with Quantified Temporal Structure of Actions", 25th International Conference on Pattern Recognition ICPR, Italy, 10-15 Jan 2021.

[37] Kelvin Yi-wen Hong, Henry Shu-hung Chung, **Alan Wai-lun Lo** and Huai Wang: "Plug-and-Play" Tiny AI-Empowered Output Filter Parameter Extraction Framework with Single RNN Cell for Digital Power", IEEE Energy Conversion Congress and Exposition (ECCE 2021), Vancouver, Canada, 10-14 Oct 2021.

[38] Eugene W.C.Wong, Philip T.Y.Lee, Daniel Y.W. Mo, Henry Y.K.Lau, Dennis K. H. Wong, **W.L.LO**: "Development of real-time cooperative VR CAVE system for collaborative training on emergency incident handling in logistics operations", 2021 IEEE International Conference on Educational Technology (ICET), 18-20 June 2021.

Journal Papers

[1] A.B.Rad and **W.L.LO** (1994): "Predictive PI Controller", **International Journal of Control (IF=2.78)**, Vol. 60, No. 5, pp. 953-975.

[2] K.M.Tsang, A.B.Rad and **W.L.LO** (1994): "PID Controllers for dominant time delay systems", **Computer and Control**, 65. Vol. 22, No. 3.

[3] A.B.Rad, K.M.Tsang and **W.L.LO** (1995): "Adaptive control of dominant time delay systems via polynomial identification", **IEE Proceeding Part-D (IF=3.343)**, Vol. 142, No. 5, Sep, 1995.

[4] A.B.Rad and **W.L.LO** (1995): "Adaptive PID Control of Systems with unknown Time Delay", **International Journal of System Science (IF=2.149)**, Vol. 26 (3), pp. 619-638.

[5] **W.L.LO** and A.B.Rad (1995): "Comparison of Two Auto-tuning Predictive PI Controller", **International Journal of Modelling and Simulation**, Vol. 15, No. 3, pp. 98-106.

[6] A.B.Rad, **W.L.LO** and K.M.Tsang (1997): "Self-tuning PID controller using Newton-Raphson search method", **IEEE Transaction on Industrial Electronics (IF=7.515)**, Vol. 44, No. 5, pp. 717-725.

[7] K.M.Tsang , **W.L.LO** and A.B.Rad (1998): "Adaptive Delay Compensated PID controller by phase margin design", **ISA Transaction (IF=4.305)** ,Vol. 37, pp. 177-187.

[8] K.M.Tsang, A.B.Rad and **W.L.LO** (1998): "Frequency Testing and Modeling by relay oscillation method", **HKIE Transaction**, Vol. 6, No. 2, August 1999, pp. 42-47.

[9] **W.L.LO**, A.B.Rad and K.M.Tsang (1999): "Auto-tuning of Output Predictive PI Controller", **ISA Transaction (IF=4.305)**Volume 38, Issue 1, January 1999, pp. 25-36.

[10] K.M.Tsang, **W.L.LO** and A.B.Rad (2000): "Auto-tuning of phase lead controller for non-self regulatory system", **IEEE Transaction on Industrial Electronics (IF=7.515)**, Vol. 47, No.1,

Feb 2000, pp.203-210

[11] K.M.Tsang, **W.L.LO** and A.B.Rad (2000): "Enhanced relay auto-tuning method by relay with variable hysteresis width", **Control and Intelligent systems**, Vol. 28, No. 1, pp. 20-28.

[12] A.B.Rad, **W.L.LO** and K.M.Tsang (2000):"Adaptive Time Delay Controller" **IEEE Transaction on Industrial Electronics (IF=7.515)**, Vol. 47, No. 6, Dec 2000, pp. 1350-1353.

[13] J.Zhang, S.H.Chung, **W.L.LO** & S.Y.R. Hui, and A.Wu (2001): "Implementation of a de-coupled Optimization for design of switching regulator using genetic algorithm", **IEEE Transaction on Power Electronics (IF=6.373)**, Vol. 16, No. 6, pp. 752-763, Nov. (2001).

[14] H.F. A.B. Rad, Ho, Y.K. Wong and **W.L.LO** (2003): "On-line lower-order modelling via Neural Network", **ISA Transaction (IF=4.305)**, Volume 42, Issue 4, Oct, 2003, pp. 577-593, 2003.

[15] **W.L.LO**, A.B.Rad and C.K.LI (2003) :" Self-tuning control of systems with unknown time delay via extended polynomial identification " **ISA Transaction (IF=4.305)**, Vol. 42, Issue 2, pp.259-272 (2003).

[16] X.M.Ren, A.B.Rad, P.T.Chan and **W.L.LO** (2003) : "Identification and control of continuous-time nonlinear systems via dynamic neural networks", **IEEE Transaction in Industrial Electronics (IF=7.515)**, Vol. 50, No. 3, pp. 478-486, 2003

[17] A.B.Rad, P.T.Chan, **W.L.LO**, and C.K.Mok (2003): "An On-line learning fuzzy controller", **IEEE Transaction in Industrial Electronics (IF=7.515)**, Vol. 50, No. 5, pp. 1016-10214 (2003)

[18] A.B.Rad, **W.L.LO** and K.M.Tsang (2003) : "Simulations on-line identification of rational dynamics and time delay: A correlation-based approach" **IEEE Transactions in Control System Technology (IF=5.312)**, Vol. 11, No. 6, Nov 2003

[19] Billy M. T. Ho, Henry S.H. Chung, and **W.L.LO** (2004) : "Use of System Oscillation to Locate the MPP of PV Panels", **Power Electronics Letters, IEEE**, Volume 2, Issue 1, March 2004, pp.1-5

[20] X M Ren, A B Rad, P T Chan and **W.L.LO** (2005) : "On-line Identification of Continuous-Systems with unknown time delay*", **IEEE Transactions on Automatic Control (IF=5.625)**, Vol. 50, No. 9, pp. 1418-1422 Sep 2005

[21] H.F. Ho, Y.K. Wong, A.B. Rad, **W.L.LO** (2005): "State Observer Based Indirect Adaptive Fuzzy Tracking Control", **Simulation Modelling Practice and Theory (IF=2.219)**, 2005, Vol. 13, pp. 646-663

[22] Jun ZHANG, **W.L. LO**, and Henry Chung (2006):"Pseudo-coevolutionary Genetic Algorithms for Power Electronic Circuits Optimization", **IEEE Transactions on Systems, Man, and Cybernetics, Part C. (IF=5.131)**, Vol.36, No.4, July 2006.

[23] Jun ZHANG, Henry Chung and **W.L.LO** (2007): "Clustering-Based Adaptive Crossover and Mutation Probabilities for Genetic Algorithms" **IEEE Transactions on Evolutionary Computation (IF=8.508)**, Vol.11, No.3, June 2007

[24] Jun ZHANG , H. Chung, and **W.L.LO** (2008): "Chaotic Time Series Prediction Using a Neuro-Fuzzy System with Time-Delay Coordinates," **IEEE Transactions on Knowledge and Data Engineering (IF=4.935),** Vol.20, No.7, July 2008.

[25] Jun Zhang, Henry Shu-Hung Chung, **Alan Wai-Lun LO**, Tao Huang (2009) : "Extended Ant Colony Optimization Algorithm for Power Electronic Circuit Design", **IEEE Transactions on Power Electronics (IF=6.373)**, Vol. 24, No. 1, Jan 2009, pp.147-162

[26] Victor S. P. Cheung, Henry S. H. Chung, Ke-wei Wang and **Alan W.L. LO** (2013): "Paralleling Multiple Static Synchronous Series Compensators Using Daisy-Chained Transformers" **IEEE Transactions on Power Electronics (IF=6.373),** 2013

[27] V. S. P. Cheung, H. S. H. Chung, and **A. W. L. LO** (2016), "A Modular and Scalable Structure Using Multi-Parallel-Connected Series-Voltage Compensators for Supply Voltage Regulation," **IEEE Transactions on Power Electronics (IF=6.373)**, vol. 31, no. 6, pp. 4096–4110, Jun. 2016

[28]   Wenguan WANG, Alex Chun-for LIU, Henry Shu-hung CHUNG, Ricky Wing-hong LAU, Jun ZHANG, **Alan Wai-lun LO** (2016) "Fault Diagnosis of Solar Panels Using Dynamic Current-Voltage Characteristics," **IEEE Transactions on Power Electronics (IF=6.373)**, vol. 31, no. 2, Feb 2016, pp.588-1599.

[29]   S. Y. Li, H. Fu and **W. L. LO** (2017), "Meteorological Visibility Evaluation on Webcam Weather Image using Deep Learning Features", **International Journal of Computer Theory and Engineering** (IJCTE), Vol. 9, No. 6, p.455-461, 2017.

[30]   Z. Liang, H. Fu, B. Xu, and **W.L.LO** (2017), "Eye-tracking Digital Aided Training System for Strabismus Therapy", **Journal of Advances in Information Technology**. Vol.8, No.1, pp. 57-62, 2017.

[31]   V. S. P. Cheung, R. S. C. YEUNG, H. S. H. Chung, **A. W. L. LO** and Weimin WU (2018), "A Transformer-less Unified Power Quality Conditioner with Fast Dynamic Control", **IEEE Transactions on Power Electronics (IF=6.373)**, Vol. 33, no. 5, pp. 3926-3937, May 2018.

[32]   Z. Chen, H. Fu, **W. L. LO**, Z. Chi and B. Xu (2018), "An Eye-tracking Aided Digital System for Strabismus Diagnosis", **Healthcare Technology Letters (IF=2.58)**, Vol. 5, Issue 1, Feb 2018, p. 1-6.

[33]   Z. Chen, H. Fu, **W. L. LO** and Z. Chi (2018), "Strabismus Recognition Using Eye-tracking Data and Convolutional Neural Networks", **Journal of Healthcare Engineering (IF=3.06)**, Volume 2018, Article ID 7692198, 9 pages, 2018.

[34]   B. Li, H. Fu, D. Wen, **W. L. LO**, (2018) "ETracker: A Mobile Gaze Tracking System with Near-Eye Display Based on Combined Gaze Tracking Algorithm", **Sensors (IF=4.35)**, 2018, 18 (5), 1626.

[35]   R. Li, B. Li, P. Zhang, H. Fu, **W. L. LO**, J. Yu, C. H. P. Sit and D. Wen (2018), "Evaluation of the Fine Motor Skills of Children with DCD using the Digitalized Visual-motor Tracking System", **The Journal of Engineering (IF=1.52)**, Volume 2018, Issue 2, , p. 123 – 129 , February 2018.

[36]   Mengyang Liu, Hong Fu, Ying Wei, Yasar Abbas Ur Rehman, Lai-man Po, **Wai Lun LO** (2019), "Light field-based face liveness detection with convolutional neural networks," **Journal of Electronic Imaging (IF=1.19)** 28(1), 013003 (2019), doi: 10.1117/1.JEI.28.1.013003.

[37]   Yang Zheng, Hong Fu, Rui Min Li, **Wai Lun Lo**, Zhe Ru Chi, David Dagan Feng, Zong Xi Song and De Sheng Wen (2019) **:** "Intelligent Evaluation of Strabismus in Videos Based on Automated Cover Test", **Applied Sciences (IF=3.02)**, February 2019, DOI: 10.3390/app9040731

[38]   Ruimin LI, Hong FU*, Yang ZHENG, **Wai-Lun LO**, Jie YU, Cindy H. P. SIT, Zheru Chi, Zongxi Song1 Desheng WEN (2019), "Automated Fine Motor Evaluation for Developmental Coordination Disorder Based on Computer Vision Analysis", **IEEE Transactions on Neural Systems and Rehabilitation Engineering (IF=4.92)**, Vol 27, Issue 5, pp 963-973, May 2019

[39]   Ruimin LI, Hong FU, **Wai Lun LO**, Zheru CHI, Zongxi SONG and Desheng Wen (2019): "Skeleton-based Action Recognition with Key-segment Descriptor and Temporal Step Matrix Model", **IEEE Access (IF=4.48),** Vol. 7, pp.169782 – 169795, 20 Nov 2019

[40]   Martin Garaj, Kelvin Yiwen Hong, Henry Shu-Hung Chung, **Alan Wai-Lun LO,** Hai WANG (2020) **: "Diagnostic Module for Series-Connected Photovoltaic Panels", Solar Energy (IF=4.608),** Vol. 196, 15 Jan 2020 pp. 243-259

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