Ian <u>Tan</u> Kim Teck, *PhD*32 Jalan GR 1/4, Cassia, Garden Residence Cyberjaya 63100 Selangor

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Current Profile (In order of "activeness")

- Associate Professor | Head of School
 School of Mathematical and Computer Sciences, Heriot-Watt University Malaysia
 Responsible for the operations and direction of the academic school. Delivery learning and teaching, marketing and recruitment strategy, team management, and ensuring governance.
- Consulting Data Scientist
 Priority Dynamics Sdn Bhd
 Active pro-bono advisory role to a niche team of data analyst and engineers in areas such as research, solutioning and techniques. The team mainly works on the telecommunications industry but has ventured out into some financial services
- External Advisory Committee
 Department of Computing and Information Systems, Sunway University
 Appointed as advisory committee to provide counsel and guidance for programme development for the programmes to achieve their goals.

Academic Qualifications

Multimedia University (2006 - 2016)

Ph.D. (Information Technology)

Enhanced Multicore Load Balancer with Core-To-Task Ratio Based Trigger Level

University of Warwick (1992 - 1993)

MSc in Parallel Computers and Computation

Imperial College London (1989 - 1992)

BEng in Information Systems Engineering

Associate, City and Guilds Institute

Professional Experience

Heriot-Watt University Malaysia

Associate Professor (2021 – Present)

Head, School of Mathematical and Computer Sciences (2021 - Present)

International conference on Computer Science and Artificial Intelligence (CSAI) 2024 *Invited Speaker*

Innov8tif Solutions Sdn Bhd

Director of AI (2022 – Present)

Monash University Malaysia Senior Lecturer (2019 – 2021) Industry Engagement Coordinator (2020 - 2021)

International conference on Asian Language Processing (IALP) Conference Co-Chair (2020)

Fatberry Sdn Bhd Chief AI Officer (2020 – 2022)

Responsible for the AI roadmap, implementation and management of data driven business focusing on user experience. This involves the automation of database documentation, building of data marts with data governance considerations, conducting analytics and visualization of actionable items for enhancing user experience.

Multimedia University
Senior Lecturer (2017 – 2019)
Lecturer (2006 – 2017)
Secretary, Data Science Institute (2016 – 2018)
Head, Commercialization, MMU Cnergy (2008 – 2009)

Partial List of Consultation/Attachment Projects

- iEnterprise Online Chief Product Strategist (2017 2019)
- MDeC MyProCert Excel to MySQL: Analytics for Business Moderator (2016 2017)
- SHRDC R Programming Instructor (2015 2017)
- MDeC MyProCert Data Science Facilitator (2015 2016)
- EliteSoft Asia Sdn Bhd Researcher Parallel algorithm for pricing forecasting (2013 2014)
- MDeC Digital Malaysia Embedded Systems Approval Committee (2012 2016)
- PradoNet Technology Sdn Bhd Research Consultant (2009)
- FreeNet Business Solutions Sdn Bhd Research Consultant (2008 2009)
- United Nations Development Programme (UNDP) –IT Project Management (2007)
- iEnterprise Online Call Center Solution Assessor (2006)

Viztel Solutions Berhad – Senior Vice President, Technology (2005 - 2006), Vice President, Operations (2001 - 2002)

As Senior Vice President of Technology, I headed the Research and Development division where my primary role was also the MSC Malaysia Research and Development Grant Scheme project manager. As Vice President of Operations, in addition to the R&D responsibilities, I was also responsible for general management including sales and customer support.

MSTi Corporation Sdn Bhd – *Corporate Services Manager (2004 - 2005), Software Manager (2002 - 2004)*

As Corporate Service Manager, responsible for evaluating new business proposals, technology startup ventures as well as potential mergers and acquisitions. As Software Manager, lead a team of 10 consultants and developers to deliver solutions for clients.

NT Software Sdn Bhd – Programme Director (1998 - 2001)

General management of the company with responsibilities on managing strategic client accounts, planning for new business initiatives and technology adoption.

StorageTek (M) Sdn Bhd – Technical Consultant (1998)

Provide implementation, support, training and consulting services for disaster recovery, data integrity as well as backup and restore best practices.

Silicon Graphics / Cray Research (M) Sdn Bhd – *Technical Consultant* (1996 - 1998), Systems Engineer (1994 - 1996)

As technical consultant; provided services for high performance computing needs in the field of computational sciences, computer aided engineering (CAE, FEA, CFD) as well as for the post-production, animation and broadcast industry. In the systems engineering role; was providing systems and network administration, code optimization, site planning and system configuration.

Intel Technology Sdn Bhd – Microprocessor Failure Analysis Engineer (1994)

Responsible for in-depth failure analysis on microprocessors through identification utilizing knowledge of computer architecture, circuit design, microelectronics device physics and semiconductor fabrication.

Funded Research Projects

2024 – 2027: FRGS Phase 1/2024 (Project Member)

Characterization of blockchain networks for propagation delay mitigation with dynamic network clustering

2024 - 2027: FRGS Phase 1/2024 (Project Member)

Enhancing Fault-Tolerance and Scalability of Quantum Walk Based Search Algorithms via Idempotent Based Error-Correcting Quantum Codes

2022 - 2024: FRGS Phase I/2022 (Project Member)

SOB-Transformer: A Subjectivity- and Objectivity-integrated Transformer with refined attention mechanism for Sentiment Analysis

2022 - 2024: FRGS Phase I/2022 (Project Member)

A Novel Context-Aware Model for Relation Extractions from Conversational Texts using Graph Convolutional Networks

2022 – 2023: EmPOWER Research Grant Scheme (Project Leader)

Word Group Tokenization in Bag-of-Words for Short Text Sentiment Analysis

2019 – 2022: FRGS Phase I/2019 (Project Member)

Robust and Precise Indoor Trajectory Tracking with Self-Learning Wi-Fi Fingerprint in Harsh Wi-Fi Environments

2020 – 2023: FRGS Phase I/2020 (Project Leader → Project Member)

Improved Scalability of Blockchain Platforms using Distributed Authenticated Skip Graphs

2020: SIT Collaborative Research Seed Grants 2020 (Project Leader)

Automated Article Scoring

2019 – 2021: FRGS Phase I/2019 (Project Member)

Robust and Precise Indoor Trajectory Tracking with Self-Learning Wi-Fi Fingerprint in Harsh Wi-Fi Environments

2019 – 2021: FRGS Phase I/2018 (Project Member)

Learning Approaches with the Re-parameterization of Proof-of-Work Protocols for Blockchain Consensus

2018 – 2021: CREST (ID: T03C1-17) (Project Member)

Research, Development and Validation of Visual Cloud Systems Analytics Framework for Internet of Things Applications

2015 - 2017: CREST (ID: P04C3-14) (Project Leader)

Context Aware Road Traffic Speech Information System from Social Media

2016 – 2018: TM R&D (Project Member)

Video Analytics for Smart Cities (SHERLOCK)

2013 – 2015: TM R&D (Sub-Project Leader)

Market Intelligence through Twitter Sentiment Analytics (MARTIAL)

2012: Intel (Kulim) (Project Leader)

OpenELEC TV for Intel N/D2x00 Based Motherboards

2009 - 2011: Intel (Project Leader)

Developing an Enhanced Algorithm for Large File Transfers Between Two Geographically Separate Location

2009 - 2011: Intel (Project Leader)

Improve of File Transfer Method by using Hybrid ARIMA and ANN Models

2007 - 2009: Intel (Project Leader)

Improved Scheduling Through Cache Affinity for Multicore Microprocessors

2007 – 2009: Intel (Project Member)

A Thread Fair Preferential Scheduling Algorithm for Linux (Completed)

Selected Experience with Patents

- Patent filed for "Network Based Intrusion Detection System using ARIMA", PI 20090539,
 Filed on 13 March 2009
- Patent filed for "Method of expressing emotions in an audio or sound output (emotisounds)",
 PI 20055438, Filed on 22 November 2005

Postgraduate Supervision (by Research)

- Graduated
 - o MSc (IT)
 - Wong Chee Siang, "Weighted Multi-Threaded Process-Fair Operating System Scheduler" (2009), Multimedia University
 - Lam Jun Wei, "Cache-Aware Multi-Core Operating System Scheduler Design" (2009), Multimedia University
 - Choo Jiun Yean, "Trust and Influence Modelling in Social Media using Analytical Hierarchy Process" (2020), Multimedia University [Co-Supervisor]
 - Lim Cheng Yang, "Road User Sentiment using Rule Based Traffic Inference"
 (2020), Multimedia University
 - Ryan Lim Woei Sheng, "Analysis of Long-term Car Park Trends from Video Surveillance" (2020), Multimedia University [Co-Supervisor]
 - Chin Zi Hau, "Learning Approaches with the Re-parameterization of Proof-of-Work Protocols for Blockchain Consensus" (2021), Multimedia University [Co-Supervisor]

- o MPhil
 - Calvin Yap, "Image Forgery Detection and Localization", (2023), Monash University Malaysia [External Supervisor]
 - Ji Soong Tan, "Improved Semantic Features for Automated Essay Scoring with Hybrid Topic Modeling Approach" (2023), Monash University Malaysia [External Supervisor]
 - Low Jia Ming, "Improving co-SVD by using data imputation" (2022), Monash University Malaysia
- o PhD
 - Yong Yun Fen, "Robust and Precise Indoor Trajectory Tracking with Self-Learning Wi-Fi Fingerprint in Harsh Wi-Fi Environments", (2024), Monash University Malaysia [External Supervisor]
 - Chin Zi Hau, "Improved Scalability of Blockchain Platforms using Distributed Authenticated Skip Graphs", (2024), Monash University Malaysia [External Supervisor]

On-Going

- o MPhil
 - Kun Shun Goh, "A Novel Context-Aware Model for Relation Extractions from Conversational Texts using Graph Convolutional Networks", 2023 – Present, Monash University Malaysia [External Supervisor]
- o PhD
 - Teh Wei Yuen, "Cognitive Neural Network for Anomaly Detection", 2021 –
 Present, Monash University Malaysia [External Supervisor]
 - Wira Samsuddin, "Improved Network Handshaking for Blockchain Scalability", 2023 – Present, Monash University Malaysia [External Supervisor]
 - Choo Tze Yee, "Characterization of Blockchain Networks for Propagation Delay Mitigation with Dynamic Network Clustering", 2024 – Present, Heriot-Watt University Malaysia [Co-Supervisor]
 - Tiong Yong Qing, "Discrete-time Quantum Walk Search on Cycle Graph with Weighted Self-Loop", 2024 – Present, Heriot-Watt University Malaysia.

Postgraduate Examiner (by Research)

- MPhil (ECE): Curtin University (External)
- PhD (IT): Asia Pacific University (External)
- MSc (IT): Multimedia University (Internal)

Selected Peer Reviewed Journal and Conference Publications

- Tiong, Yong Qing, Kai Lin Ong, and **Ian KT Tan**. "Discrete-time quantum walk search on the cycle graph with weighted self-loop." *Quantum Information Processing* 24, no. 10 (2025): 1-24.
- Wira, Samsuddin Samsuddin, Chee Keong Tan, Wai Peng Wong, and Ian KT Tan. "Cloudnative simulation framework for gossip protocol: Modeling and analyzing network dynamics." PLoS One 20, no. 6 (2025): e0325817.
- Chin, Zi Hau, Vishnu Monn Baskaran, Chee Keong Tan, Ian KT Tan, and Timothy TV Yap.
 "DAP-CBR: enhancing Bitcoin block propagation efficiency using dynamic compact block relay's prefilling of transactions." The Journal of Supercomputing, 81, no. 1 (2025).
- Liew, Pei Yee, and Ian KT Tan. "On Automated Essay Grading using Large Language Models."
 In Proceedings of the 2024 8th International Conference on Computer Science and Artificial Intelligence, pp. 204-211. 2024.
- Yong, Yun Fen, Chee Keong Tan, Ian KT Tan, and Su Wei Tan. "Kernel density-based radio map optimization using human trajectory for indoor localization." *Journal of Ambient Intelligence and Humanized Computing* 15, no. 11 (2024): 3745-3757.
- Goh, Kun-Shun, lan KT Tan, and Hui-Ngo Goh. "Towards automated financial market knowledge graph construction." In AIP Conference Proceedings, vol. 3153, no. 1. AIP Publishing, 2024.
- Eashvaren Chandar, Wing Kin Chong, Timothy Tzen Vun Yap, Hu Ng, Vik Tor Goh, Lai Kuan Wong, Ian Kim Teck Tan, Dong Theng Cher, "Objectivity-Subjectivity Detection to Boost Sentiment Analysis Accuracy: An Approach using BERT", Journal of System and Management Sciences, Vol. 14, No. 3, pp. 400-417, 2024.
- Yong, Yun Fen, Chee Keong Tan, lan KT Tan, and Su Wei Tan. "C-VoNNI: a precise fingerprint
 construction for indoor positioning systems using natural neighbor methods with clusteringbased Voronoi diagrams." Journal of Supercomputing, 2023.
- Teh, Wei Yuen, Lim, Chern Hong, Lim, Mei Kuan, Ian K.T. Tan, "Towards Discrete Object Representations in Vision Transformers with Tensor Products", In 2023 International Conference on Computer Science and Artificial Intelligence (CSAI 2023), [Accepted], 2023.
- Tan, Jih Soong, Hui Jia Yee, Ivan Boo, Ian KT Tan, and Helmi Zakariah. "Investigating the Stability of SMOTE-Based Oversampling on COVID-19 Data." In Science and Information Conference, Cham: Springer Nature Switzerland, 2023: pp. 470-480.

- Yong, Yun Fen, Chee Keong Tan, **Ian K.T. Tan**, and Su Wei Tan. "Robust fingerprint construction based on multiple path loss model (M-PLM) for indoor localization." Computers, Materials and Continua 74, no. 1 (2023): 1801-1818.
- Teh, Wei Yuen, and Ian KT Tan. "TransUNet for Cross-Domain Semantic Segmentation of Urban Scenery." In 2022 International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS), pp. 1-4. IEEE, 2022.
- Yap, Calvin, KokSheik Wong, Ganesh Krishnasamy, and Ian KT Tan. "Detection For Non-Genuine Identification Documents." In 2022 International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS), pp. 1-4. IEEE, 2022.
- Teh, Wei Yuen, Ian KT Tan, and Heng Kiat Tan. "Liveness Detection for Images and Audio."
 In 2022 International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS), pp. 1-2. IEEE, 2022.
- Jia Ming, Low, Chern Hong Lim, and Ian KT Tan. "Improving co-SVD for cold-start recommendations using sparsity reduction." In 2022 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC), pp. 990-996. IEEE, 2022.
- Yun Fen, Yong, Chee Keong Tan, Ian KT Tan, and Su Wei, Tan. "Radio Map Construction Using Fingerprints Clustering and Voronoi Diagram for Indoor Positioning." In 2022 21st International Symposium on Communications and Information Technologies (ISCIT), pp. 64-69. IEEE, 2022.
- Tan, Jih Soong, **Ian KT Tan**, Lay Ki Soon, and Huey Fang Ong. "Improved Automated Essay Scoring using Gaussian Multi-Class SMOTE for Dataset Sampling." In Proceedings of the 15th International Conference on Educational Data Mining, p. 647. 2022.
- JS Tan, **IKT Tan**, "Ablation Study On Feature Group Importance For Automated Essay Scoring", Asia-Pacific Journal of Information Technology and Multimedia, 11 (1), 2022.
- ZH Chin, TTV Yap, **IKT Tan**, "Genetic-Algorithm-Inspired Difficulty Adjustment for Proof-of-Work Blockchains", Symmetry 14, no. 3 (2022): 609.
- JM Low, IKT Tan, CH Lim, "Refined co-SVD Recommender Algorithm: Data Processing and Performance Metrics", Proceedings of the 11th International Conference on Pattern Recognition, pp. 668-674. Scitepress, 2022
- YF Yong, CK Tan, **IKT Tan**, "SMOTE for Wi-Fi Fingerprint Construction in Indoor Positioning Systems", IEEE International Performance, Computing, and Communications Conference, pp. 1-6. 2021
- WY Teh, **IKT Tan**, "Coloured Edge Maps for Oil Palm Ripeness Classification", The 32nd British Machine Vision Conference, 22-25 Nov 2021

- Tan, Jih Soong, and Ian KT Tan. "Feature group importance for automated essay scoring." In Multi-disciplinary Trends in Artificial Intelligence: 14th International Conference, MIWAI 2021, Virtual Event, July 2–3, 2021, Proceedings, pp. 58-70. Cham: Springer International Publishing, 2021.
- Tan I.K.T., Lim YH., Hon NH., "Towards Palm Bunch Ripeness Classification Using Colour and Canny Edge Detection". In: Alfred R., Iida H., Haviluddin H., Anthony P. (eds) Computational Science and Technology. Lecture Notes in Electrical Engineering, vol 724. Springer, Singapore. 2021.
- Chin Z.H., Yap T.T.V., Tan I.K.T. "Proof-of-Work Difficulty Readjustment with Genetic Algorithm". In: Anbar M., Abdullah N., Manickam S. (eds) Advances in Cyber Security. ACeS 2020. Communications in Computer and Information Science, vol 1347. Springer, Singapore. 2021
- Chin, Zi Hau, Timothy Tzen Vun Yap, and **Ian KT Tan**. "Simulating Difficulty Adjustment in Blockchain with SimBlock." In Proceedings of the 2nd ACM International Symposium on Blockchain and Secure Critical Infrastructure, pp. 192-197. 2020.
- Chin, Zi Hau, Timothy Tzen Vun Yap, and **Ian KT Tan**. "On the trade-offs of Proof-of-Work algorithms in blockchains." In Computational Science and Technology, pp. 575-584. Springer, Singapore, 2020.
- Hassan, Md Mahedi, **Ian KT Tan**, and Timothy Tzen Vun Yap. "Data of vertical and horizontal handover on video transmission in Proxy Mobile IPv6." Data in brief 27 (2019): 104736.
- Lim, Cheng Yang, **Ian KT Tan**, and Bhawani Selvaretnam. "Domain-General Versus Domain-Specific Named Entity Recognition: A Case Study Using TEXT." In International Conference on Multi-disciplinary Trends in Artificial Intelligence, pp. 238-246. Springer, Cham, 2019.
- Low, Jia-Ming, **Ian KT Tan**, and Choo-Yee Ting. "Recent Developments in Recommender Systems." In International Conference on Multi-disciplinary Trends in Artificial Intelligence, pp. 38-51. Springer, Cham, 2019.
- Cheong, C. W., Ryan W. S. Lim, John See, Wong Lai Kuan, lan K. T. Tan, "Efficient Semantic-Based Vehicle Retrieval in Long-term Car Park Videos." In 2019 IEEE International Conference on Multimedia & Expo Workshops (ICMEW), pp. 138-143. IEEE, 2019.
- Lim, C.Y., **Tan, Ian K.T.**, Selvaretnam, B., Ewe K.H. and Lau H.K. "TEXT: Traffic Entity eXtraction from Twitter." In Proceedings of the 2019 5th International Conference on Computing and Data Engineering, pp. 53-59. ACM, 2019.

- Hassan, M.M., Tan, Ian K.T., Selvaretnam, B. and Poo, K.H., "SINR-based conversion and prediction approach for handover performance evaluation of video communication in Proxy Mobile IPv6." Computers & Electrical Engineering, 74, pp.164-183, 2019
- Cheong, C. W., Ryan W. S. Lim, John See, Wong Lai Kuan, Ian K. T. Tan, Azrin Aris, "Vehicle Semantics Extraction and Retrieval for Long-Term Carpark Video Surveillance." International Conference on Multimedia Modeling (pp. 315-326). Springer, 2018.
- Ryan W. S. Lim, Cheong, C. W., John See, Ian K. T. Tan, Wong Lai Kuan, Khor, H. Q., "On vehicle state tracking for long-term carpark video surveillance." IEEE International Conference on Signal and Image Processing Applications (ICSIPA), pp. 368 373, IEEE, 2017
- Low Jia Ming, lan K. T. Tan, Poo Kuan Hoong. "Classifying drivers using electronic logging devices." International Conference on Information and Communication Technology (ICoICT), pp. 1 – 5, IEEE, 2017.
- Ian K. T. Tan, Boon Yaik Ooi, Boon Sheng Ooi, "Predicting Shopper Volume Using ARIMA on Public Wi-Fi Signals." International Information Institute (Tokyo). Information 19, no. 8A (2016): 3295.
- Ooi Boon Yaik, Kong Zan Wai, Ian K. T. Tan, and Ooi Boon Sheng. "Measuring the Accuracy of Crowd Counting using Wi-Fi Probe-Request-Frame Counting Technique." Journal of Telecommunication, Electronic and Computer Engineering (JTEC), Vol.8(2), pp. 79-81, 2016.
- Lim Cheng Yang, Bhawani Selvaretnam, Poo Kuan Hoong, Ian K. T. Tan, Ewe Kok Howg, and Lau Heng Kar. "Exploration of Road Traffic Tweets for Congestion Monitoring." Journal of Telecommunication, Electronic and Computer Engineering (JTEC), Vol.8(2), pp. 141-145, 2016.
- Poo Kuan Hoong, Ian K. T. Tan and Chai Kai Weng, A comparison of people counting techniques via video scene analysis, ARPN Journal of Engineering and Applied Sciences, Vol.10(23), pp. 18123 – 18127, 2015.
- Tan, Ian KT, Kuan Hoong Poo, and Chin Hong Yap. "Towards Auto-Extracting Car Park Structures: Image Processing Approach on Low Powered Devices." In Advances in Visual Informatics, pp. 315-325. Springer International Publishing, 2015.
- Ooi, Boon Yaik, Chee Siang Wong, lan KT Tan, and Chee Keong Lee. "Towards Natural Gestures for Presentation Control Using Microsoft Kinect." In Advances in Multimedia Information Processing (PCM), pp. 258-261. Springer International Publishing, 2014.
- Choo Jiun Yean, Ting Choo Yee, **Tan, I.K.T.**, "Relative trust management model for Twitter: An Analytic Hierarchy Process approach", International Conference on Frontiers of Communications, Networks and Applications (ICFCNA 2014), pp.1 6, November 2014.

- Ian K.T. Tan, Poo Kuan Hoong, Chee Ken Hong, and Low Zhi Wen. "Towards the Implementation of an Ubiquitous Car Park Availability Detection System", In Frontier and Innovation in Future Computing and Communications, pp. 875-884. Springer Netherlands, 2014.
- Poo Kuan Hoong, Ong Yen Shyang, **Ian K.T. Tan,** "Red-black tree architecture for P2P media streaming", In TENCON 2013-2013 IEEE Region 10 Conference, pp. 1-4. IEEE, 2013.
- Tan, Ian KT, Ian Chai, and Poo Kuan Hoong. "Dynamic threshold for imbalance assessment on load balancing for multicore systems." Computers & Electrical Engineering 39, no. 2 (2013): 338-348.
- Poo Kuan Hoong, lan K.T. Tan, Chee Yik Keong, Bittorrent Network Traffic Forecasting With ARMA, International Journal of Computer Networks & Communications (IJCNC), Vol. 4 (4), pp. 143 - 156, 2012.
- Alireza Beikverdi, lan K. T. Tan, "Improved Look-Ahead Re-Synchronization Window For HMAC-Based One-Time Password", IET International Conference on Wireless Communications and Applications (ICWCA 2012), Kuala Lumpur, October 2012. pp. 1 – 5.
- Poo Kuan Hoong, lan K. T. Tan, Ong Kok Chien, Choo-Yee Ting, "Road Traffic Prediction Using Bayesian Networks", IET International Conference on Wireless Communications and Applications (ICWCA 2012), Kuala Lumpur, Malaysia, October 2012, pp. 1 - 5
- Chin-Tong Tan, Ian K. T. Tan, "CAPTCHA HMAC-Based One-Time Password (CHOTP) Generation", The 3rd International Conference on Cryptology and Computer Security, Langkawi, Malaysia, 4 6 June, 2012. pp. 55 60
- Ian K.T. Tan, Tze-Wei Su, Hao-Ming Khor, Ee-Chun Ong, "Effectiveness of RSS Feed Item Duplication Detection using Word Matching", Sunway Academic Journal Vol. 8, pp. 38 – 53, 2011.
- Tze-Wei Su, Hao-Ming Khor, Ian K. T. Tan, "Utilizing Word Matching for Duplicate Article Removal: A Study using Malaysian Online News Feed", In Proc. of 1st Symposium on Information and Computer Sciences 2011 (ICS2011), Bandar Sunway, Malaysia, June 2011, pp. 70 - 73. Best Paper Award
- Yik Keong Chee, Jay W. L. Lim, **Ian K.T. Tan**, Poo Kuan Hoong, Kin Wai Lau, "A Scalable Approach to Real-Time Multiplayer Online In-Game Advertisement via Peer-to-Peer", In Proceedings of The Third IEEE International Conference on Communication Software and Networks (ICCSN2011), Xi'an, China, May 2011.
- Ng Kar Hoong, Poo Kuan Hoong, lan K. T. Tan, Nithiapidary A/P Muthuvelu and Lee Ching Seng, "Impact of Utilizing Forecasted Network Traffic for Data Transfers", In Proceedings of

- 13th International Conference on Advanced Communication Technology (ICACT11), *Korea,* February 2011. pp. 1199 1204.
- Ian K. T. Tan, Kuan Hoong Poo, Yik Keong Chee, "Towards Forecasting Low Network Traffic for Software Patch Downloads: An ARMA model forecast using CRONOS", In 2nd International Conference on Computer and Network Technology (ICCNT 2010), Bangkok, Thailand, April 23-25, 2010.
- Tan, Ian KT, Ian Chai, and Poo Kuan Hoong. "Pthreads performance characteristics on shared cache CMP, private cache CMP and SMP." In Computer Engineering and Applications (ICCEA), 2010 Second International Conference on, vol. 1, pp. 186-191. IEEE, 2010.
- Poo Kuan Hoong, lan K. T. Tan, and Ng Kar Hoong, "Computing Autoregressive Moving Average (ARMA) with Cronos: A Case Study of Bursa Malaysia", In 2nd International Conference on Engineering & ICT 2010 (ICEI 2010), Melaka, Malaysia, 18-20 February 2010.
- Asrul H. Yaacob, lan K. T. Tan, S. F. Chien, H. K. Tan, "ARIMA Based Network Anomaly Detection", In The 2nd International Conference on Communication Software and Networks (ICCSN 2010), Singapore, 26-28 February 2010.
- Ghobadi Alireza, Eswaran C., Muthuvelu Nithipidary, Tan Ian, "An Adaptive Wrapper Algorithm for File Transfer Applications to Support Optimal Large File Transfers", Proceedings of 11th International Conference on Advanced Communication Technology (ICACT09), Korea, February 2009.
- Wong, C. S., I. K. T. Tan, R. D. Kumari, and K. P. Kalaiyappan. "Iterative performance bounding for greedy-threaded process." In TENCON 2009-2009 IEEE Region 10 Conference, pp. 1-7. IEEE, 2009.
- Wong, Chee Siang, **Ian Tan**, Rosalind Deena Kumari, and Fun Wey. "Towards achieving fairness in the Linux scheduler." ACM SIGOPS Operating Systems Review 42, no. 5 (2008): 34-43.
- Wong, C. S., I. K. T. Tan, R. D. Kumari, J. W. Lam, and W. Fun. "Fairness and interactive performance of o (1) and cfs linux kernel schedulers." In 2008 International Symposium on Information Technology, vol. 4, pp. 1-8. IEEE, 2008.