CURRICULUM VITAE (BRIEF)

JONATHAN H. CHAN, Ph.D., P.Eng.

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WORK EXPERIENCE (since 2020)

November 2020-Present	Director, Innovative Cognitive Computing (IC2) Research Center School of Information Technology King Mongkut's University of Technology Thonburi (KMUTT), Thailand
December 2019-November 2020	Acting Director, IC2-DLab School of Information Technology King Mongkut's University of Technology Thonburi (KMUTT), Thailand
June 2013-Present	Associate Professor, School of Information Technology King Mongkut's University of Technology Thonburi (KMUTT), Thailand
June 2016-Present	Visiting Scientist, The Centre for Applied Genomics Sick Kids Hospital, Toronto, Canada

EDUCATION

1995	Ph.D. (Chemical Engineering), University of Toronto, Canada
1986	M.A.Sc. (Chemical Engineering), University of Toronto, Canada
1984	B.A.Sc. (Engineering Science, Chem Eng Option), Univ of Toronto, Canada

AFFILIATIONS AND ACADEMIC SERVICES (since 2020)

Professional Affiliations

- Fellow APNNS, SMINNS, SMIEEE, SMACM.
- Member, Board of Governors, International Neural Network Society (INNS), 2023-2025.
- President, Asia Pacific Neural Network Society (APNNS), 2023-2024
- President-Elect, APNNS, 2022.
- Pro Tempore Vice-President Education, APNNS, 2019-2020, 2022
- Member, Governing Board, APNNS, 2015-2020, 2022-2023.
- Advisor, IEEE-CIS Thailand Chapter, 2022-present.
- Chair, IEEE-CIS Thailand Chapter, 2020-2021.
- Member of Professional Engineers of Ontario (PEO).

Editorial and Journal Reviewer Roles

- Action Editor, Neural Networks (Elsevier, SCI-indexed, IF 6.3), 2013-2026.
- Section Editor, Heliyon Computer Science (Cell Press, SCIE-indexed, IF 3.6), 2019-May 2024.
- Reviewer of Applied Soft Computing, Information Sciences, Neural Networks, Neural Computation and Applications, Journal of Biomedical Informatics, Memetic Computing, Neurocomputing, IEEE Computational Intelligence Magazine, Journal of Human Genetics, Expert Systems with Applications, Computers in Biology and Medicine, etc.

Conference Committee Roles

Member of International Advisory Board, Program Committee and/or Technical Committee for numerous international conferences such as International Joint Conference on Neural Networks (IJCNN), International Conference on Neural Information Processing (ICONIP), AAAI Annual Conference on Artificial Intelligence (AAAI), International Joint Conference on Artificial Intelligence (IJCAI), International Conference on Bioinformatics (InCoB), IEEE/WIC/ACM International Conference on Web Intelligence (WI), International Conference on Brain Informatics (BI), and so on.

FUNDING AND GRANTS (since 2020)

- Host academic supervisor, Mitacs Globalink Research Award (Canada) – six (6) research abroad projects (IT5087, IT50702, IT50795, IT50847, IT50704, IT51948), 2026.

- Host academic supervisor, Mitacs Globalink Research Award (Canada) – four (4) research abroad projects (IT45398, IT45693, IT45711, IT45716), 2025.
- ASEAN Lead PI, ASEAN-India Collaborative research project – "A Multi Modal Approach to Medical Diagnosis Embedding Deep and Transfer Learning", 2020-2022. IMRC/AISTDF/CRD/2019/000151
- Co-investigator, NRCT (National Research Council of Thailand) – "Virtual Companion for the Elderly", 2018-19, extension until 2021.

SCIENTIFIC CONTRIBUTIONS

Journal Publications (selected recent)

1. Momand, Ziaullah, Pornchai Mongkolnam, Jonathan H. Chan, Nipon Charoenkitkarn, and Debajyoti Pal. "Building digital twins for elderly care: an end-to-end framework from data acquisition to modeling." *IEEE Access* (2025).
2. Momand, Ziaullah, Pornchai Mongkolnam, Jonathan H. Chan, and Nipon Charoenkitkarn. "Integrating Sensor Data with Large Language Models for Enhanced Elderly Care: A Methodological Framework." Sensors & Materials 37 (2025).
3. Kazimierczak, Mateusz, Nuzaira Habib, Jonathan H. Chan, and Thanyathorn Thanapattheerakul. "Impact of AI on the cyber kill chain: A systematic review." Heliyon 10, no. 24 (2024).
4. Zhang, Weixu, Yifei Wang, Yuanfeng Song, Victor Junqiu Wei, Yuxing Tian, Yiyan Qi, Jonathan H. Chan, Raymond Chi-Wing Wong, and Haiqin Yang. "Natural Language Interfaces for Tabular Data Querying and Visualization: A Survey." IEEE Transactions on Knowledge and Data Engineering (2024).

Books/Journals/Proceedings Edited (selected recent)

1. Kitsuchart Pasupa, Haiqin Yang, Mufti Mahmud, Sung-Bae Cho, Min Pan, Hongzhi Kuai, Ah-Hwee Tan, Yiyu Yao, Jonathan Chan (Eds). Proceedings of the 2024 IEEE/WIC International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT 2024), Bangkok, Thailand, December 9-12, 2024, IEEE, 2024.
2. Haiqin Yang, Kitsuchart Pasupa, Andrew Chi-Sing Leung, James T. Kwok, Jonathan H. Chan, Irwin King (Eds). Neural Information Processing - 27th International Conference, ICONIP 2020, Bangkok, Thailand, November 23-27, 2020, Proceedings, Part I-III. Lecture Notes in Computer Science 12532-12534, Springer 2020
3. Haiqin Yang, Kitsuchart Pasupa, Andrew Chi-Sing Leung, James T. Kwok, Jonathan H. Chan, Irwin King (Eds). Neural Information Processing - 27th International Conference, ICONIP 2020, Bangkok, Thailand, November 23-27, 2020, Proceedings, Part IV-V. Communications in Computer and Information Science 1332-1333, Springer 2020

Conference Proceedings (selected recent)

1. Noh, Jiyoo, Wantong Huo, Kaung Myat Kyaw, Abigale Brown, Khush Agarwal, and Jonathan H. Chan. "Multimodal Forecasting of Psychosocial and Functional Recovery in Older Adults After Lower Limb Fracture." In *AI for Aging, Rehabilitation and Intelligent Assisted Living: The 9th Workshop ARIAL@ IJCAI, IJCAI 2026, Bremen, Germany, August 17, 2026, Proceedings*, p. 28-44. Springer Nature, 2026.
2. Cheung, Hei Shing, Boya Zhang, and Jonathan H. Chan. "SAMUeL: Efficient Vocal-Conditioned Music Generation via Soft Alignment Attention and Latent Diffusion." In 2025 IEEE/WIC International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT), pp. 568-571. IEEE, 2025.
3. Agarwal, Khush, and Jonathan Hoyin Chan. "A Modular Pipeline for Cross-Lingual Singing Voice Translation with Subjective Evaluation." In *2025 IEEE/WIC International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT)*, pp. 679-686. IEEE, 2025.
4. Kyaw, Kaung Myat, and Jonathan Hoyin Chan. "A Framework for Synthetic Audio Conversations Generation Using Large Language Models." In 2024 IEEE/WIC International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT), pp. 355-359. IEEE, 2024.
5. Mac Yves, Dylan, and Jonathan Hoyin Chan. "Measuring Spoken English Proficiency Level Based on IELTS Speaking Test Using Machine Learning Models." In 2024 IEEE/WIC International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT), pp. 433-437. IEEE, 2024.
6. Zong, Y., Jing, C., Chan, J. H., & Wang, S. (2024, May). BrainNetDiff: Generative AI Empowers Brain Network Construction Via Multimodal Diffusion. In 2024 IEEE International Symposium on Biomedical Imaging (ISBI) (pp. 1-5). IEEE.