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AFFILIATIONS AND ACADEMIC SERVICES

Professional Affiliations

- SMINNS, SMIEEE, SMACM.
- President-Elect, Asia Pacific Neural Network Society (APNNS), 2022.
- Member, Governing Board, Asia Pacific Neural Network Society (APNNS).
- Vice-President Membership, Asia Pacific Neural Network Society (APNNS), 2015-16.
- Member, Governing Board, Asia Pacific Neural Network Assembly (APNNA), 2007-15.
- Member, IEEE CIS Emergent Technologies Technical Committee (ETTC), 2011-16.
- Secretary, International Neural Network Society (INNS), 2011-12.
- President, APNNA, 2009.
- Member of Professional Engineers of Ontario (PEO).

Editorial and Journal Reviewer Roles

- Section Editor, Heliyon Computer Science (Cell Press, SCIE-indexed, IF 3.776), 2019-present.
- Action Editor, Neural Networks (Elsevier, SCI-indexed, IF 9.657), 2013-present.
- 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), International Conference on Bioinformatics (InCoB), IEEE Symposium Series on Computational Intelligence (SSCI), IEEE Visual Communications and Image Processing (VCIP), IEEE Congress on Evolutionary Computation (CEC), IEEE/WIC/ACM International Conference on Web Intelligence (WI), International Conference on Computational Aspects of Social Networks (CaSoN), IEEE Symposium on Computational Intelligence and Data Mining (CIDM), and so on.

SCIENTIFIC CONTRIBUTIONS

Patent and Intellectual Property

1. Pornchai Mongolnam, Jonathan H. Chan, Thanet Prompinit, Salisa Cheawcharnthong, "Smart Attendance Checking System for Classroom," Thai Petty Patent No. 14793 (granted 2019).
2. Pornchai Mongolnam, Jonathan H. Chan, Jutarat Choomkasean, "Multimedia Delivery over the Internet," Thai Petty Patent No. 9989 (granted 2015).

Journal Publications (5 most recent)

1. Chan J. H., Li C., "Learning from imbalanced COVID-19 chest X-ray (CXR) medical imaging data," *Methods*, 202, 2022, pp.31-39.
2. Thanapatheerakul T., Engchuan W., Chan J. H., "Predicting the effect of variants on splicing using Convolutional Neural Networks," *PeerJ* 2020, 8:e9470.

3. Prissadang Suta, Xi Lan, Biting Wu, Pornchai Mongkolnam, and Jonathan Chan, “An Overview of Machine Learning in Chatbots,” *International Journal of Mechanical Engineering and Robotics Research*, 9(4), pp.502-510, April 2020.
4. Wutthipong Kongburan, Mark Chignell, Nipon Charoenkitkarn, Jonathan H. Chan, “Enhancing Predictive Power of Cluster-Boosted Regression with Text-Based indexing,” *IEEE Access*, 7, March 2019, 43394-43405.
5. Wutthipong Kongburan, Praisan Padungweang, Worarat Krathu, Jonathan H. Chan, “Enhancing Metabolic Event Extraction Performance with Multitask Learning Concept,” *Journal of Biomedical Informatics*, 93, May 2019, Article number 103156

Books/Journals Edited (since 2020)

1. Agrawal, S., Gupta, K., Chan, J. H., Agrawal, J., Gupta, M. (Eds). *Machine Intelligence and Smart Systems – Proceedings of MISS 2021, Algorithms for Intelligent Systems*, Springer 2022
2. Agrawal, S., Gupta, K., Chan, J. H., Agrawal, J., Gupta, M. (Eds). *Machine Intelligence and Smart Systems – Proceedings of MISS 2020, Algorithms for Intelligent Systems*, Springer 2021
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 I-III. Lecture Notes in Computer Science 12532-12534*, Springer 2020
4. 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
5. Chan, J.H., Wintle, R.F., Kusonmano, K., Engchuan, W. (Eds.) *Proceedings of the Eleventh International Conference on Computational Systems-Biology and Bioinformatics, CSBio 2020, Bangkok, Thailand, November 19-21, 2020, ACM ICPS 2020*

Book Chapter

1. Tuul Triyason, Sake Valaisathien, Vajirasak Vanijja, Prasert Kanthamanon, and Jonathan H. Chan, “VoIP Quality Prediction Model by Bio-Inspired Methods,” in *Bio-inspired Computation in Telecommunications*, Xin-She Yang, Su Fong Chien, Tiew On Ting (Eds.), Chapter 5, pp. 95-115, Morgan Kaufmann

Conference Proceedings (5 selected recent papers)

1. Sakdipat Ontoum and Jonathan H. Chan. 2022. Automatic Text Summaration of COVID-19 Scientific Research Topics Using Pre-trained Model from HuggingFace. *In The 2022 Research, Invention, and Innovation Congress (RI2C 2022)*, August 4-5, 2022, Bangkok, Thailand. (**Best Paper Award – Special Session: IEEE-CIS Thailand Chapter**)
2. Hanna Sigurdson and Jonathan H. Chan. 2021. Machine Learning Applications to Sports Injury: A Review. *The 9th International Conference on Sports Sciences Research and Technology Support (icSPORTS2021)*. October 28-29, 2021, pages 157-168.
3. Any Wei Liu and Jonathan H. Chan. 2021. An Evaluation of Transfer Learning with CheXNet on Lung Opacity Detection in COVID-19 and Pneumonia Chest Radiographs. *In The 13th International Conference on Information Technology and Electrical Engineering (ICITEE2021)*. October 14-15, 2021.
4. Shafinul Haque, Andy Wei Liu, Serena Liu, and Jonathan H. Chan. 2021. Improving the Robustness of a Convolutional Neural Network with Out-of-Distribution Data Fine-Tuning and Image Preprocessing. *In The 12th International Conference on Advances in Information Technology (IAIT2021)*. June 29 to July 1, 2021. Association for Computing Machinery, New York, NY, USA, Article 26, 1–7.
5. Chen, A., Jaegerman, J., Matic, D., Inayatali, H., Charoenkitkarn, N., Chan, J., “Detecting Covid-19 in Chest X-Rays using Transfer Learning with VGG16,” *Proceedings of the 11th International Conference on Computational Systems-Biology and Bioinformatics (CSBio2020)*. 19-21 November 2020, Virtually, Bangkok, Thailand. pp. 93-96.