

Curriculum Vitae – Ling Chen (陳翎)



Personal Details

Present Position: Assistant Professor
Affiliation: Institute of Hospital and Health Care Administration, National Yang Ming Chiao Tung University, Taiwan

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Key Skills

- Deep learning (feature learning, image denoising, text detection and recognition) and machine learning
- Natural language processing, computer vision, and longitudinal data analysis
- Python packages (tensorflow, pytorch, scikit-learn, opencv, numpy, scipy), Matlab, Ubuntu (Linux) OS

Educational Qualifications

- Ph.D. in Computer Science (Data Mining), University of Queensland (UQ), Apr. 2013 – Feb. 2017
- Master of Computer Science, UQ, Jul. 2010 – Nov. 2011
- Master of Information Technology, UQ, Mar. 2009 – Jun. 2010
- Bachelor of Arts (Philosophy major), National Taiwan University, Sep. 2002 – Jun. 2006

Employment History

- 2020 – Present** **Assistant Professor**, Institute of Hospital and Health Care Administration, National Yang Ming Chiao Tung University, Taiwan.
- 2018 – 2020** **Researcher**, Clarivate Analytics, Brisbane, Australia.
- 2016 – 2018** **Research Developer**, TrademarkVision (acquired by Clarivate Analytics, Oct. 2018), Brisbane, Australia.
- 2015 – 2015** **Internship**, Hunan Research Centre for Hypertension, The 3rd Xianya Hospital, Central South University, China.
- 2011 – 2012** **Part-time Research Assistant**, University of Queensland, Australia
- 2009 – 2012** **Teaching Assistant**, University of Queensland, Australia

Publications

Journal Articles:

1. **Ling Chen**, Sung-Hao Huang, Tzu-Hsiang Wang, Vincent S. Tseng, Hsuan-Ming Tsao, and Gau-Jun Tang (2024 May), “Automatic 3D left atrial strain extraction framework on cardiac computed tomography,” *Comput. Methods Programs Biomed.*, vol. 252, p. 108236, 2024, <https://doi.org/10.1016/j.cmpb.2024.108236>.
2. Kao-Jung Chang, Tai-Chi Lin, Chih-Chien Hsu, Cherng-Ru Hsu, Wei-Hao Chang, Cheng-Yi Li, **Ling Chen**, De-Kuang Hwang, Shih-Jen Chen, Shih-Hwa Chiou (2024, Apr). Rearrange Anatomy Inputs Like LEGO Bricks: Applying InSSSS-P and a Mobile-Dense Hybrid Network to Distill Vascular Significance from Retina OCT-angiography. *IEEE Computational Intelligence Magazine*. (Accepted). (SCI, 17/145, COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE).
3. **Ling Chen**, Vincent S. Tseng, Ta-Hsin Tsung, & Da-Wen Lu (2024, Feb). A Multi-label Transformer-based Deep Learning Approach to Predict Focal Visual Field Progression. *Graefe's Archive for Clinical and Experimental Ophthalmology*, <https://doi.org/10.1007/s00417-024-06393-1>. (SCI, 28/62,

- OPHTHALMOLOGY). 本人為第一作者。
4. **Ling Chen**, Sung-Hao Huang, Tzu-Hsiang Wang, Tzuo-Yun Lan, Vincent S. Tseng, Hsuan-Ming Tsao, Hsueh-Han Wang, and Gau-Jun Tang (2023, Jan). Deep Learning-based Automatic Left Atrial Appendage Filling Defects Assessment on Cardiac Computed Tomography for Clinical and Subclinical Atrial Fibrillation Patients. *Heliyon*, 9(1), e12945. (SCIE, 28/74, MULTIDISCIPLINARY SCIENCES). nstc 110-2222-E-A49A-501-MY3. 本人為第一作者。
 5. Fang-Ming Hung, Chih-Ho Hsu, Jun-En Ding, **Ling Chen** (2022, Aug). Hospital transfer risk scoring system for a Taiwan COVID-19 medicalized hotel based on graph convolutional networks. *Journal of the Formosan Medical Association*, 121(12), 2653-2655. (SCIE, 61/172, MEDICINE, GENERAL & INTERNAL). 本人為通訊作者。Correspondence.
 6. Jing-Xian Shu, Ying Li, Ting He, **Ling Chen**, Xue Li, Lin-Lin Zou, Yin Lu, Xiao-Hui Li, An-Li Wang, Xing Liu, Hong Yuan (2018, Jan). Applying a “Big Data” Literature System to Recommend Antihypertensive Drugs for Hypertension Patients with Diabetes Mellitus. *Medical Science Monitor*, 24, 114-148. (SCIE, 89/139, MEDICINE, RESEARCH & EXPERIMENTAL).
 7. **Ling Chen**, Xue Li, Quan Z. Sheng, Wen Chih Peng, John Bennett, Hsiao Yun Hu, Nicole Huang (2016, Sep). Mining Health Examination Records - A Graph-Based Approach. *IEEE Transactions on Knowledge and Data Engineering*, 28(9), 2423-2437. (SCIE, 18/145, COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE). 本人為第一作者。
 8. **Ling Chen**, Xue Li, Yi Yang, Hanna Kurniawati, Quan Z. Sheng, Hsiao-Yun Hu, Nicole Huang (2016, Jan). Personal health indexing based on medical examinations: A data mining approach. *Decision Support Systems*, 81(2016), 54-65. (SCIE, 33/145, COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE). 本人為第一作者。
 9. **Ling Chen**, Yang Liu, Marcus Gallagher, Bernard Pailthorpe, Shazia Sadiq, Heng Tao Shen, Xue Li (2012, Oct). Introducing cloud computing topics in curricula. *Journal of Information Systems Education*, 23(3): 315-324. 本人為第一作者。

Book Chapters:

1. **Ling Chen**, Vincent S. Tseng, Hsuan-Ming Tsao, Gau-Jun Tang. Personalized decision support for cardiology based on deep learning: an overview. *Edge-of-Things in Personalized Healthcare Support Systems* (ISBN: 978-0-323-90585-5). London, United Kingdom: Elsevier Inc.. Jun, 2022: 45-75. MOST 110-2222-E-A49A-501-MY3.
2. Sayan Unankard, **Ling Chen**, Peng Li, Sen Wang, Zi Huang, Mohamed A. Sharaf, Xue Li. On the prediction of re-tweeting activities in social networks - A report on WISE 2012 challenge. *Web Information Systems Engineering - WISE 2012. WISE 2012. Lecture Notes in Computer Science, vol 7651* (ISBN: 978-3-642-35062-7). Berlin, Heidelberg: Springer. Nov, 2012: 7651 LNCS, 744-754.

Conference Papers:

1. Po-Kuang Chen, Shih-Hsien Sung, **Ling Chen** (2024, Apr). Applying Gaussian Mixture Model for clustering analysis of emergency room patients based on intubation status. 22nd International Conference of AI in Medicine (AIME 2024), Salt Lake City, Utah, USA. 本人為通訊作者。Short Paper.
2. Da-Wen Lu, Ta-Hsin Tsung, and **Ling Chen** (2023, Nov). Predicting Visual Field Progression for Glaucoma Patients and Suspects using Deep Learning. The 64th Annual Meeting of the Ophthalmological Society of Taiwan, Taipei, Taiwan. 本人為通訊作者。Poster.
3. Yong-Wei Chen, Wei-Chieh Huang, Cheng-Hsueh Wu, **Ling Chen** (2023, May). Automatic Artery Segmentation in Coronary Angiography based on Deep learning. 31st Annual Meeting of the Japanese Society of Cardiovascular Intervention and Therapeutics (CVIT2023), Kyushu/Okinawa, Japan. nstc 110-2222-E-A49A-501-MY3. 本人為通訊作者。Oral.
4. Pokuang Chen, Shih-Hsien Sung, **Ling Chen** (2023, Mar). Using LSTM Model to Predict the Transmission Trends and Spreading Speed of the COVID-19 Urban Epidemic Transmission Scale. 22nd International Conference on Emergency Medicine, Amsterdam, The Netherlands. Poster.
5. **Ling Chen**, Xue Li, Sen Wang, Hsiao Yun Hu, Nicole Huang, Quan Z. Sheng, Mohamed Sharaf (2014, Dec). Mining Personal Health Index from Annual Geriatric Medical Examinations. 2014 IEEE International Conference on Data Mining, 761-766.

Awards

- **2014 Premier's Awards for Open Data** - Best Use of Open Data and Microsoft StartUp Q Award (WikiQueensland- a big data fusion system), Queensland, Australia
- **Richard Jago Memorial Prize** 2014, University of Queensland (UQ)
- UQ Graduate School sponsorship, **2014 C9-Go8 Forum** on Global Challenges of Ageing, Sydney
- **First prize** of the Data Mining Track, WISE 2012 Challenge