Yiming Zhang | Curriculum Vitae

Ph.D. Candidate

Education

University of Nottingham

Ningbo, China

Doctor of Philosophy

Sep 2020 - Present

Ph.D. Thesis Theme: Deep-Learning based Automated and Objective Assessment of Operative Skill in Laparoscopic Surgery

University of Melbourne

Melbourne, Australia

Master of Information Technology

Feb 2018 - Dec 2019

University of Nottingham

Nottingham, UK

Bachelor of Science with Honours in Computer Science, First Class

Sep 2013 - July 2017

Research Interests

- Surgical Data Science, Surgical Skill Assessment
- Medical Image Analysis
- Explainable Artificial Intelligence, Interpretable Machine Learning
- o Deep Learning, Machine Learning
- Multivariate Time Series Classification
- Computer-aided Diagnosis

Publications

Journal Papers

- Yiming Zhang, Ke Chen, Ying Weng, Zhuo Chen, Juntao Zhang, and Richard Hubbard, An Intelligent Early Warning System of Analyzing Twitter Data Using Machine Learning on COVID-19 Surveillance in the US, *Expert Systems with Applications (ESWA)*, 2022, in Press, DOI:10.1016/j.eswa.2022.116882.
- **Yiming Zhang**, Ying Weng, and Jonathan Lund, Application of Explainable Artificial Intelligence in the Diagnosis and Surgery, *Diagnostics*, vol. 12, no. 2, p. 237, 2022.

Conference Papers

 Ran Fei, Ying Weng, Yiming Zhang, and Jonathan Lund, Curve based Fast Detail Enhancement for Biomedical Images, In Proceedings of the 16th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISAPP 2021), 8-10 February 2021, Virtual Conference.

Chinese Patents

• Ying Weng, Ke Chen, **Yiming Zhang**, A method and system for rating surgical skills based on explainable artificial intelligence (under application)

Awards and Achievements

- UNNC Doctoral Research Grant (5000 RMB), 2021
- UNNC PhD Scholarship Award Healthcare Scholarship (492450 RMB), 2020

Professional Activities

- Reviewer for MDPI Sensors
- Reviewer for Journal of Artificial Intelligence Research

Languages

- English [Full Professional Proficiency]
- **Chinese** [Native Proficiency]

Misc

- Programming Language Python [good], C#, Java, JavaScript, Node.js [Basic]
- o Knowledge of: **Keras, Tensorflow, PyTorch, Scikit-learn**, Pandas, NumPy, LaTeX, Linux
- Google Scholar: https://scholar.google.com/citations?hl=en&user=WCku-uIAAAAJ
- o GitHub: https://github.com/yiming95

References

o Dr. Ying Weng

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o Dr. Jonathan Lund

Clinical Associate Professor Faculty of Medicine & Health Sciences University of Nottingham, Nottingham, UK jon.lund@nottingham.ac.uk Telephone: 01332 724 694

Prof. Zhuo Chen

Li Dak Sum Chair Professor School of Economics University of Nottingham, Ningbo, China Zhuo.Chen@nottingham.edu.cn Telephone:+86 (0)574 8818 0000 (Ext. 8565)