

Tianzhong Lan

+86 18811568798
lantianzhong1@stu.scu.edu.cn
tzhongboy97.github.io

Education

- 2022 – **Sichuan University**, Ph.D. in Computer Science and Technology.
Present Advisor: Prof. **Min Zhu**, Lab: Vision Computing Lab
- 2019 – 2022 **Sichuan University**, M.S. in Software Engineering.
Advisor: Prof. **Zhang Yi**, Lab: Machine Intelligence Lab
- 2015 – 2019 **Northern University of Technology**, B.E. in Computer Science and Technology, *GPA: Top 10% of majors*.

Research Interests

Machine Learning & Computer Vision, with a particular focus on **Medical Image Processing**, **Domain Adaptation**, **Explainable AI**

Publications and Preprints

- C1 **Tianzhong Lan**, Jingwei Li, Xiuyuan Xu, Chengdi Wang, Zhang Yi, Weimin Li, and Jixiang Guo. "A Deep Learning Based Method for Structuring the Chinese Pathological Reports of Lung Specimen." In 2021 11th International Conference on Information Science and Technology (ICIST), pp. 158-165. IEEE, 2021.
- J1 Jun Shao, Gang Wang, Le Yi, Chengdi Wang, **Tianzhong Lan**, Xiuyuan Xu, Jixiang Guo, Taibing Deng, Dan Liu, Bojiang Chen, Zhang Yi, Weimin Li. Deep Learning Empowers Lung Cancer Screening Based on Mobile Low-Dose Computed Tomography in Resource-Constrained Sites. *Front. Biosci. (Landmark Ed)* 2022, 27(7), 212.
- P1 **Tianzhong Lan**, Fanxin Zeng, Zhang Yi, Xiuyuan Xu, Min Zhu. "ICNoduleNet: Mitigating the Performance Discrepancy of Pulmonary Nodule Detectors on Different CT Reconstruction Kernels".

Research Experience

- Sep 2020 – **Research in Image Quality Control on Pulmonary Nodule Detection**, *Project supported by the National Natural Science Foundation of China (Grant No.2018AAA0100201) and the National Natural Science Foundation of China (Grant No.62106163).*
Present
- Proposed a **deep learning-based** method for mitigating the performance gap of pulmonary nodule detectors on different CT imaging. [P1]
- Developed a pulmonary nodule detection system with team members, which assists radiologists and thoracic surgeons in lung cancer diagnosis. This software has been deployed and used in many hospitals, including West China Hospital of Sichuan University, Dazhou Central Hospital, etc.
- Developed a plugin based on QT5, which assists the operation of the above software.
- Patents written on software have been granted. [PT1]
- Nov 2019 – **Research in Medical Text Processing**, *Project supported by the Major Science and Technology Project from the Science & Technology Department of Sichuan Province (Grant No. 2019KJT0101- 2018GZDZX0035).*
Apr 2021
- Proposed a **deep learning-based** method for Structuring the Chinese Pathological Reports of Lung Specimen. [C1].
- Developed an image reporting module to display structured analysis results.

Patents

Authorized patent

- PT1 Weimin Li, Zhang Yi, Chengdi Wang, Jixiang Guo, Jun Shao, Xiuyuan Xu, Yanqi He, **Tianzhong Lan**, Yale Yang, Yuanyuan Chen. "Lung cancer full-cycle intelligent management imaging data platform". CN112669314B.

Activities

- 2022 **National "Internet +" College Students Innovation and Entrepreneurship Competition.**
National First Price

Honors and Awards

- 2022 Outstanding Graduate of Sichuan University
2020, 2021 Outstanding Student of Sichuan University
2021, 2022 Second-class of Excellent Graduate Scholarship by Sichuan University

Skills

- Programming Python, PyTorch, C++, QT, JavaScript, HTML/CSS, SQL, Linux command, Git
Others Chinese (Mandarin secondary-level A certificate), English (CET-6: 536), Violin (Amateur Level 10)