Personal Information

Full Name：	WU Wangjiang	Gender：	Male
Born：	March 1993	Birth Place：	Linfen, Shanxi
Phone：	86-17888810958	Email：	1014910755@qq.com
Address：	Southern Medical University, Guangzhou, China		

Education Experience

Southern Medical University

- Ph.D. in Biomedical Engineering. Guangzhou, China
- Dissertation: "Cold-cathode Flat-panel X-ray Source based phase constrast imaging" Sep. 2021– July 2025

Capital Medical University

- M.S., Biomedical Engineering. Beijing, China
- Dissertation: "CT Image Quality Assessment Based on Volumetric Data" Sep. 2016 – July 2019

Capital Medical University

- B.S. in Biomedical Engineering. Beijing, China
- Dissertation: "Research and Design of Lower Limb Virtual Rehabilitation Training Scene". Sep. 2012 – July 2016

Work Experience

Medical Physicist, Peking University Third Hospital

- Design radiotherapy treatment plans using Eclipse and Oncentra treatment planning system Beijing, China
- Perform patients specific plan QA. Conduct monthly quality assurance (QA) for Linac and HDR Brachytherapy machine Aug. 2019 - Aug. 2021

Publications

Journal Articles

1. Zhang X., Dai J., Chen J.#, **Wu, W.#,** and Xu Y.#, Characteristic Analysis of Anode Panel for ZnO Nanowires Cold Cathode Flat-Panel X-ray Source Using Monte Carlo Simulation, Nuclear Science and Techniques, (2024) (**# co-corresponding author**).
2. **Wu, W.**, Qi, M., Chen, X., Zhou, Y., Pan, Z., Kang, S., Dai, J., Zhang, X., Zhou, L., Chen, J. and Xu, Y. Feasibility Study of a Cold-cathode Flat-panel X-ray Source with Micro-array Anode Target for Grating Interferometer Computed Tomography. IEEE Transactions on Nuclear Science. (2023)

3. Piao, Z., Deng, W., Huang, S., Lin, G., Qin, P., Li, X., **Wu, W.,** Qi, M., Zhou, L., Li, B. and Ma, J. Adaptive scatter kernel deconvolution modeling for cone-beam CT scatter correction via deep reinforcement learning. Medical Physics. (2023)
4. Qin, P., Lin, G., Li, X., Piao, Z., Huang, S., **Wu, W.,** Qi, M., Ma, J., Zhou, L. and Xu, Y. A correlated sampling-based Monte Carlo simulation for fast CBCT iterative scatter correction. Medical Physics, 50(3), pp.1466-1480. (2023)
5. Li, X., Huang, S., Pan, Z., Qin, P., **Wu, W.,** Qi, M., Ma, J., Kang, S., Chen, J., Zhou, L. and Xu, Y. Deep learning based de-overlapping correction of projections from a flat-panel micro array X-ray source: Simulation study. Physica Medica, 111, p.102607. (2023)
6. **Wu, W.**, Qu, J., Cai, J. and Yang, R. Multiresolution residual deep neural network for improving pelvic CBCT image quality. Medical Physics, 49(3), pp.1522-1534. (2022)
7. **WU, W.**, LI, Y., YANG, Z. Performance of multi-slice channelized Hotelling observer for low-contrast signal detection in simulated CT data[J]. Chinese Journal of Medical Physics, 35(12):1462-1467. (2018)

Conference Proceedings

1. Shao G, Li Q, Pan Z, Chen X, Zhang X., Liu Q., Guicai Qi, Chen J., **Wu W.#**, Xu Y#, Zhou L#. Source Phase Stepping for grating interferometry using Addressable Cold-Cathode Flat-Panel X-ray Source, XNPIG 2024. (**Oral Presentation, Corresponding Author**)
2. **Wu W.**, Dai J., Qi M., et al. Simulation study of a novel ZnO nanowire cold cathode flat-panel x-ray source using EGSnrc for Talbot-Lau type grating interferometry[C]//Medical Imaging 2023: Physics of Medical Imaging. SPIE, 2023, 12463: 47-52. **(Oral Presentation + Conference Papaer)**
3. **Wu W.**, Qu J., Cai J., et al. Multi-Resolution Residual Deep Neural Network for Generating Synthetic CT Images with High HU Accuracy and Structural Fidelity. (**Oral Presentation** at AAPM 2021 Virtual 63rd Annual Meeting)

Skills

- GRE: 168Q, 159V, 3.5W
- TOEFL: 96
- Experienced in MATLAB, Python, C and C++