Yong Yang
Clinical Professor, Radiation Oncology - Radiation Physics

Bio

ACADEMIC APPOINTMENTS

• Clinical Professor, Radiation Oncology - Radiation Physics

Publications

PUBLICATIONS

• Automated contouring, treatment planning, and quality assurance for VMAT craniospinal irradiation (VMAT-CSI). *Frontiers in oncology*

• Automating the Treatment Planning Process for Volumetric Modulated Arc Therapy Craniospinal Irradiation (VMAT-CSI). *Practical radiation oncology*

• Personalized Accelerated ChEmoRadiation (PACER) for Lung Cancer: Protocol for a Bayesian Optimal Phase I/II Trial. *Clinical lung cancer*

• An overview of artificial intelligence in medical physics and radiation oncology. *JOURNAL OF THE NATIONAL CANCER CENTER*
  Liu, J., Xiao, H., Fan, J., Hu, W., Yang, Y., Dong, P., Xing, L., Cai, J. 2023; 3 (3): 211-221

• Learning image representations for content-based image retrieval of radiotherapy treatment plans. *Physics in medicine and biology*

• Fully automated segmentally boosted VMAT. *Medical physics*
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• Modeling linear accelerator (Linac) beam data by implicit neural representation learning for commissioning and quality assurance applications. *Medical physics*
  Liu, L., Shen, L., Yang, Y., Schüler, E., Zhao, W., Wetzstein, G., Xing, L. 2023

• Mitigating the uncertainty in small field dosimetry by leveraging machine learning strategies. *Physics in medicine and biology*
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• Implicit neural representation for radiation therapy dose distribution. *Physics in medicine and biology*
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- Meta-optimization for fully automated radiation therapy treatment planning. *Physics in medicine and biology*
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- Dose Prediction for Cervical Cancer Brachytherapy Using 3-D Deep Convolutional Neural Network *IEEE TRANSACTIONS ON RADIATION AND PLASMA MEDICAL SCIENCES*
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- Deep learning-augmented radioluminescence imaging for radiotherapy dose verification. *Medical physics*
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- Fully automated noncoplanar radiation therapy treatment planning. *Medical physics*
  Huang, C., Yang, Y., Xing, L.
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- Deep learning-enabled EPID-based 3D dosimetry for dose verification of step-and-shoot radiotherapy. *Medical physics*
  Jia, M., Wu, Y., Yang, Y., Wang, L., Chuang, C., Han, B., Xing, L.
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- Independent verification of brachytherapy treatment plan by using deep learning inference modeling. *Physics in medicine and biology*
  Fan, J., Xing, L., Yang, Y.
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- Deep learning-augmented radiotherapy visualization with a cylindrical radioluminescence system. *Physics in medicine and biology*
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- Automated multi-parameter high-dose-rate brachytherapy quality assurance via radioluminescence imaging. *Physics in medicine and biology*
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- Verification of the machine delivery parameters of treatment plan via deep learning. *Physics in medicine and biology*
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