

Ruixiang Tang

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518 H.R. Bright Building College Station, TX 77843-3112

EDUCATION

Texas A&M University
Ph.D., Computer Science

College Station
09/2019- present

Tsinghua University
Bachelor of Science in Life Science
Bachelor of Science in Automation
Overall GPA 3.5/4.0

Beijing, China
09/2014- 07/2016
07/2016- 07/2019

RESEARCH INTERESTS

Explainable AI (XAI); Security of AI Systems; Fairness in Machine Learning

INDUSTRY EXPERIENCE

12sigma company (SDE Intern)

01/2018-09/2018

I am mainly responsible for the development of medical image algorithms, such as bone suppression.
Work based on Python, Matlab

HUAWEI(SDE Intern at Software Analysis Lab)

09/2018-05/2019

Intelligent R&D services, I am responsible for the analysis of JAVA code defect detection and repair services.
Work based on Java, MySQL.

Microsoft Research Asia (Research Intern)

05/2019-07/2019

Interpretable Recommendation System. Mentor: Xiting Wang
Work based on Python

PUBLICATION

Tang, R., Tushar, F.I., Han, S., Hou, R., Rubin, G.D. and Lo, J.Y., 2019, March. **Classification of chest CT using case-level weak supervision**. In *Medical Imaging 2019: Computer-Aided Diagnosis* (Vol. 10950, p. 1095017). International Society for Optics and Photonics.

Fu, W., Sharma, S., Smith, T., Hou, R., Abadi, E., Selvakumaran, V., **Tang, R.**, Lo, J.Y., Segars, W.P., Kapadia, A.J. and Solomon, J.B., 2019, March. **Multi-organ segmentation in clinical-computed tomography for patient-specific image quality and dose metrology**. In *Medical Imaging 2019: Physics of Medical Imaging* (Vol. 10948, p. 1094829). International Society for Optics and Photonics.

Lin, C., **Tang, R.**, Lin, D.D., Liu, L., Lu, J., Chen, Y., Gao, D. and Zhou, J., 2019, October. **Breast Mass Detection in Mammograms via Blending Adversarial Learning**. In *International Workshop on Simulation and Synthesis in Medical Imaging* (pp. 52-61). Springer, Cham.

Tang, R., Du, M., Liu, N., Yang, F. and Hu, X., 2020. **An embarrassingly simple approach for trojan attack in deep neural networks**. *arXiv preprint arXiv:2006.08131*. (Accepted by KDD 2020 Research Track)

Lin, C., **Tang, R.**, Lin, D.D., Liu, L., Lu, J., Chen, Y., Gao, D. and Zhou, J., 2020, April. **Deep Feature Disentanglement Learning for Bone Suppression in Chest Radiographs**. In *2020 IEEE 17th International Symposium on Biomedical Imaging (ISBI)* (pp. 795-798). IEEE.

Tang, R., Du, M., Li, Y., Liu, Z. and Hu, X., 2020. **Mitigating Gender Bias in Captioning Systems.** *arXiv preprint arXiv:2006.08315.* (Under Review)

Du, M., **Tang, R.**, weijie Fu and Hu, X., 2020. **An Embarrassingly Simple Approach to Bias Mitigation via Decorrelating Feature Influence.** (under review)

Liu, N*., **Tang, R*.**, Fan Yang., and Hu, X., 2020. **Defense Against Explanation Manipulation,** * equal contribution (under review)

PROJECT

Explainable Artificial Intelligence (DARPA XAI)

09/2019- present

MEDIA COVERAGE

“TrojanNet – a simple yet effective attack on machine learning models”., [The Daily Swig](#) **07/2019**

“An Embarrassingly Simple Approach for Trojan Attack in Deep Neural Networks”., [Marktechpost](#) **07/2019**

“数秒植入木马，一击即破，你的 DNN 模型还安全吗？” [机器之心 SyncedTech](#) **07/2019**

COMPETITIONS

Meritorious Winner in Interdisciplinary Contest In modeling 2018 (Top 10%).

The Silver Medal of IGEM (International Genetically Engineered Machine) in 2017.

The Gold Medal of Chinese Biology Olympia in Senior in 2012 (ranked seventh).

SKILLS

Programming Languages: Proficient in C++, Python, Intermediate in MATLAB, C# and Verilog.

Software Tools: Proficient in TensorFlow, MATLAB.

HONORS&AWARDS

Technological Innovation Award(Top 10%) **2017**

Outstanding Freshman Scholarship (Top 10%) **2014**

Academic Progress Award(Top 30%) **2015**

KDD 2020 Travel Award **2020**