Aishan Liu

School of Computer Science and Engineering, Beihang Univerisity, China
New Main Building, No.37 Xueyuan Rd., Beijing, China, 100084
https://liuaishan.github.io/

Contact

Phone: (+86) 158-0121-8985

Email: liuaishan@buaa.edu.cn or aishan23liu@gmail.com

Research Interests

- **Robust and Interpretable Deep Learning:** Adversarial Example, Model Robustness and Stability, Interpretation of Model Behavior and Representation

- **Vision and Language:** Embodied Agent

Education

- School of Computer Science and Engineering   2017.09 - Present
  Beihang University, Beijing, China
  Ph.D. Student, advised by Prof. Wei Li and Prof. Xianglong Liu
  Rank: 14/68 (Top20%)

- School of Computer Science and Engineering   2013.09 - 2016.03
  Beihang University, Beijing, China
  Master of Engineering, advised by Prof. Wei Li
  Rank: 48/235 (Top20%)

- School of Computer Science and Engineering   2009.09 - 2013.06
  Beihang University, Beijing, China
  Bachelor of Engineering
  Rank: 20/188 (Top10%)

Publications

- Spatiotemporally-Coupled Attack: Towards Evaluating Adversarial Robustness of Embodied Agents.
  Aishan Liu, Tairan Huang, Xianglong Liu, Yitao Xu and Dacheng Tao.
  Under Review of CVPR-2020

- Interpreting and Improving Adversarial Robustness with Neuron Sensitivity.
  Chongzhi Zhang*, **Aishan Liu***, Xianglong Liu, Yitao Xu and HangYu. (* indicates equal contribution)
  ArXiv Preprint 1909.06978

- Towards Noise-Robust Neural Networks via Progressive Adversarial Training.
  Hang Yu*, **Aishan Liu***, Xianglong Liu and Jichen Yang. (* indicates equal contribution)
  ArXiv Preprint 1909.04839

- Training Robust Deep Neural Networks via Adversarial Noise Propagation.
  Aishan Liu, Xianglong Liu, Chongzhi Zhang, Hang Yu, Qiang Liu and Junfeng He.
  ArXiv Preprint 1909.09034

- Region-wise Generative Adversarial Image Inpainting for Large Missing Areas.
  Yuqing Ma, Xianglong Liu, Shihao Bai, Lei Wang, **Aishan Liu**, Dacheng Tao and Edwin Hancock.
  ArXiv Preprint 1909.12507

- Coarse-to-Fine Image Inpainting via Region-wise Convolutions and Non-Local Correlation.
  Yuqing Ma, Xianglong Liu, Shihao Bai, Lei Wang, Dailan He and **Aishan Liu.**
  *International Joint Conference on Artificial Intelligence (**IJCAI**), Macao, China, 2019*

- Perceptual Sensitive GAN for Generating Adversarial Patches.
  Aishan Liu, Xianglong Liu, Jiaxin Fan, Yuqing Ma, Anlan Zhang, Huiyuan Xie and Dacheng Tao.
  *AAAI Conference on Artificial Intelligence (**AAAI**), Honolulu, Hawaii, USA, 2019.*

Selected Awards

- **Tencent Rhino-Bird Elite Training Program (Nationwide 56)**   2019.05

- **AAAI-19 Student Scholarship**   2019.01

- **Outstanding Graduate Award, Beihang University**   2016.01

- **Guanghua Scholarship, Beihang University**   2015.12

- **Outstanding Graduate Award, Beijing**   2013.06

- **CCF National Outstanding Undergraduate, China (Nationwide 100)**   2012.10

- **Google Excellence Scholarship, Google**   2012.06

Professional Activities

- **Conference Reviewer:** IJCAI 2019, ACM MM 2019

- **Journal Reviewer:** Pattern Recognition