

Haotian Xue

Junior Student @ CS. SJTU

Email : xavihart@sjtu.edu.cn

Mobile : +86 19921872686

Homepage : <https://htxue.info>

EDUCATION

- **Shanghai Jiao Tong University** Shanghai, China
Bachelor of Science in Computer Science; GPA: 88.5/100, maths related: 91.4/100 *Sept. 2018 – June 2022 (Expected)*
Relevant Coursework: Mathematical Analysis, Artificial Intelligence, Computer Graphics, Digital Image Processing, Computer Network, Operating System, Computer Architecture and Organization, Algorithm and Complexity, Data Structure, Discrete Mathematics, Linear Algebra, Probability and Statistics

EXPERIENCE

- **John Hopcroft Center for Computer Science** Shanghai, China
Explainable Artificial Intelligence, *Research Intern, tutored by Prof. Quanshi Zhang* Jun 2019 – Now
 - Work on proposing a set of criteria to evaluate the objectiveness of explanation methods of neural networks, and design four metrics to evaluate explanation results without ground-truth explanations based on Shapley value in game theory (Submitted to CVPR2021).
 - Work on explaining for overfitting and generalization in deep learning based on multi-player interaction in game theory (ongoing).
- **Zhiyuan Honor Program of Engineering** Shanghai, CN
Sept. 2018 – Now
 - Complete all Honor credits for science subjects, including A+(only one in class) in Mathematical Analysis(1) and A(top 5) in Mathematical Analysis(2).
 - Complete all Honor credits for engineering subjects including Data Structure instructed by Prof. Yong Yu. I gained a lot from this course.
 - Complete almost all Computer Science courses in CS Dept, get a GPA of 92.11/100 in the learned CS subjects, including Mathematical foundations of computer science (rank 1/80), Operating System, Computer Architecture and Organization

RESEARCH INTERESTS

- **Explainable Artificial Intelligence(♦)**: Including explainable CNNs, explainable GANs, unsupervised semanticization of pre-trained neural networks, evaluation of present explaining methods, mechanism for generalization of DNNs
- **Computer Vision**: Including traditional methods of image processing, fancy deep learning based methods for image classification, detection and segmentation, and more important, what vision concepts are actually learned by the models

PUBLICATIONS/PREPRINTS

Hao Zhang, Jiayi Chen, **Haotian Xue** and Quanshi Zhang, *Towards a Unified Evaluation of Explanation Methods without Ground Truth* [arXiv:1911.09017]

SELECTED PROJECTS

- **Deque and B+ Tree**: Implementation of Deque and B+ Tree data structure in C++ in Data Structure class in Zhiyuan College tutored by Prof. Yong Yu.
- **ICM-2020 project**: nMAT: a network-based assessment system for soccer game with teammates. Got the Meritorious Awards in ICM-2020.
- **CS214 course project**: Build a Genetic Algorithm solution combined with local search for problems in customized bus-booking platform in project of CS214, tutored by Prof. Xiaofeng Gao.

AWARDS

- **Zhiyuan College Honors Scholarship (CN ¥15000, Top5%)**:
- **Singapore Technologies Engineering Scholarship (CN ¥5000, Top 20%)**:
- **Zhiyuan College Excellent Scholarship (Class C, CN ¥1000)**: