

EDUCATION

Tsinghua University

Zhili College, B.Sc. in Physics, GPA: **3.98/4.00**

Selected Coursework:

Physics: Analytical Mechanics

Math: Advanced Calculus, Linear Algebra for Physical Sciences, Topology (Audit), Graduate Group Theory (Audit)

CS: Machine Learning (Coursera), Theoretical Computer Science (MOOC)

Beijing, China

2020–Current

Shanghai High School

Awards: Outstanding Graduate, Student of the Year (2019)

Shanghai, China

2017–2020

PUBLICATIONS

- [1] H. Zhao and P. Liao, *CaE-admm: Implicit bitrate optimization via admm-based pruning in compressive autoencoders*, 2019. arXiv: 1901.07196 [cs.CV].

SKILLS

- **Tools:** Git, L^AT_EX, Shell, Slurm
- **Frameworks:** PyTorch, Keras, TensorFlow, numpy, pandas, scikit-learn
- **Programming:** Python, C/C++, Mathematica, MATLAB

LANGUAGES

- **Chinese:** native
- **English:**
 - **TOFEL:** N/A
 - **GRE:** N/A

PROJECTS

See full list of projects on hmzhao.me

- **CAE-ADMM**
(Learned Image Compression, Neural Architecture Search, Computer Vision, Deep Learning, 2019)
We introduce ADMM-pruned Compressive AutoEncoder (CAE-ADMM) that uses Alternative Direction Method of Multipliers (ADMM) to optimize the trade-off between distortion and efficiency of lossy image compression.

SCHOLARSHIPS AND AWARDS

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| • S. -T. Yau High School Science Award (Computer), Gold Prize | 2019 |
| • The Awarding Program for Future Scientists, title of “Future Scientist” | 2019 |
| • Chinese Physics Olympiad, Bronze Medal | 2019 |