

# JIALI CUI

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## ABOUT ME

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I am a Ph.D. student at Stevens Institute of Technology, advised by [Dr. Tian Han](#).

My **research interest** can be summarized as:

- **Generative Probabilistic Model** (Energy-based model(EBM), Generator Model, Diffusion Probabilistic Model)
- **Unsupervised Learning, Semi-supervised Learning**
- **Representation Learning**

## PUBLICATION

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### Learning Energy-based Model via Dual-MCMC Teaching.

- **Jiali Cui**, Tian Han.
- *The 37th Conference on Neural Information Processing Systems (@ NeurIPS 2023)*
- Learning energy-based model (EBM) with complementary generator and inference model with Markov Chain Monte Carlo (MCMC) sampling for both the EBM and generator posterior.

### Learning Hierarchical Features with Joint Latent Space Energy-Based Prior.

- **Jiali Cui**, Ying Nian Wu, Tian Han.
- *The IEEE/CVF International Conference on Computer Vision (@ ICCV 2023)*
- Learning energy-based (EBM) prior model of multi-layer latent variables for representation learning and disentanglement learning.

### Learning Joint Latent Space EBM Prior Model for Multi-layer Generator.

- **Jiali Cui**, Ying Nian Wu, Tian Han.
- *The IEEE/CVF Conference on Computer Vision and Pattern Recognition 2023 (@ CVPR 2023)*
- Learning joint energy-based (EBM) prior model with multi-layer generator model for image modelling and representation learning.

### Semi-supervised learning by latent space energy-based model of symbol-vector coupling.

- Bo Pang, Erik Nijkamp, **Jiali Cui**, Tian Han, Ying Nian Wu.
- *Workshop on I Can't Believe It's Not Better (ICBINB) @ NeurIPS, 2020*
- Learning symbol-coupling energy-based (EBM) prior model for both the discriminative and generative tasks.

## EDUCATION

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### Stevens Institute of Technology

Ph.D. in Computer Science

- **Teaching Assistant:** CS583. Deep Learning

Hoboken, NJ

2021 – Now

### Stevens Institute of Technology

M.S. in Computer Science

- **Course Assistant:** CS559. Machine Learning, CS515. Fundamentals of Computing

Hoboken, NJ

2019 – 2021

### Harbin Institute of Technology

B.S. in Computer Science

- **Thesis:** Colorizing Gray Image via Self-Attention Generative Adversarial Network
- **Selected Courses:** Programming Languages (Java, Python, R, etc.), Deep Learning, Machine Learning, Statistical Machine Learning

Harbin, China

2015 – 2019

## SERVICE

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**Reviewer** ECCV'22, AAAI'22, CVPR'23, NeurIPS'23, AAAI'24, ICLR'24, CVPR'24, ECCV'24