

# Tiansheng Wen

Xi'an, China | [neilwen987@gmail.com](mailto:neilwen987@gmail.com) | [Google Scholar](#)

Homepage: <https://neilwen987.github.io/>

## EDUCATION

### Xidian University

M.S. in Information and Telecommunication Engineering

Advisor : **Prof. Bo Chen**

Overall GPA: 3.8 / 4.0

Toefl: 99 (Speaking: 22)

Xi'an, China

Sept. 2023 - present

### Xidian University

Bachelor in Electronic Engineering

Advisor : **Prof. Bo Chen**

Overall GPA: 3.8 / 4.0; Rank: 32/342

Xi'an, China

Sept. 2019 - Jul. 2023

## EXPERIENCE

### Stony Brook University

Research Intern

Advisor : **Prof. Chenyu You**

Research Focus: Sparsity, Adaptive Representation Learning, Uncertainty Estimation

NY, United States

Jul. 2024 - Oct. 2025

## RESEARCH INTERESTS

My primary research goal is to develop **efficient, scalable, and reliable** methods for machine learning and generative AI, with a particular focus on sparsity, adaptive representation learning, and principled uncertainty estimation in foundation models—including LLMs, VLMs, and diffusion models. I am also interested in the memorization effects in foundation models, especially at the intersection of cognitive science and machine learning.

## PUBLICATION(\* EQUAL CONTRIBUTION)

### 8. Beyond Matryoshka: Revisiting Sparse Coding for Adaptive Representation

Tiansheng Wen\*, Yifei Wang\*, Zequn Zeng, Xinyang Liu, Bo Chen, Hongwei Liu, Stefanie Jegelka, Chenyu You

ICML 2025 (**Oral**) | Github repo 120+ stars

### 7. Route Experts by Sequence, Not by Token

Tiansheng Wen\*, Yifei Wang\*, Bo Chen, Stefanie Jegelka, Chenyu You

ICLR 2026 (under review)

### 6. Zero the Features, Not the Scores: Scaling Attention via Feature Sparsity

Xie Yan\*, Tiansheng Wen\*, Bo Chen, Chenyu You, Stefanie Jegelka, Yifei Wang

ICLR 2026 (under review)

### 5. CSrv2: Unlocking Ultra-Sparse Embeddings

Lixuan Guo\*, Yifei Wang\*, Tiansheng Wen\*, Bo Chen, Stefanie Jegelka, Chenyu You

ICLR 2026 (under review)

### 4. Contrastive Factor Analysis

Zhibin Duan\*, Tiansheng Wen\*, Yifei Wang, Chen Zhu, Bo Chen, Mingyuan Zhou

IJCV (under review)

3. **A Non-negative VAE: the Generalized Gamma Belief Network**  
Zhibin Duan, **Tiansheng Wen**, Muyao Wang, Bo Chen, Mingyuan Zhou  
TPAMI (under review)

2. **Explaining Domain Shifts in Language: Concept erasing for Interpretable Image Classification**  
Zequn Zeng, Yudi Su, Jianqiao Sun, **Tiansheng Wen**, Hao Zhang, Zhengjue Wang, Bo Chen,  
Hongwei Liu, Jiawei Ma  
CVPR 2025

1. **HICEScore: A Hierarchical Metric for Image Captioning Evaluation**  
Zequn Zeng, Jianqiao Sun, Hao Zhang, **Tiansheng Wen**, Yudi Su, Yan Xie, Zhengjue Wang, Bo Chen  
ACM MM 2024

SERVICE

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**Journal Reviewer:** TPAMI, JMLR, PR, TMI, TNNLS.  
**Conference Reviewer:** NeurIPS, ICLR, CVPR, AAAI.

AWARDS & HONORS

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- National Scholarship in Xidian University2025
  - First-Class Graduate Scholarship in Xidian University2024
  - Second-Class Undergraduate Scholarship in Xidian University2021
  - First-Class Undergraduate Scholarship in Xidian University2020

TECHNICAL PROFICIENCIES

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**Programming Languages:** Python, C/C++, MATLAB, HTML, etc.  
**Tools & Frameworks:** PyTorch, vLLM, LLaMA-Factory, Git, Latex, Markdown, etc.  
**Language:** Mandarin (Native speaker), English (Fluent).