

## RESEARCH INTERESTS

---

My primary research goal is to solve practical problems or to provide inspiration for future study and develop methods that are both accessible and effective. With this goal in mind, I am currently working on **Generative Modeling** and **Representation Learning** as well as their applications in image generation, text analysis, graph learning and transfer learning.

Specifically, I am also interested in or working in the following subjects:

- **Diffusion model** and its application on downstream tasks.
- Prompt learning and cross-modal learning with pretrain models.
- Topic modeling.
- Graph representation learning.
- Few-shot learning and domain adaption.
- Optimal theory and its application in machine learning.
- Any interesting machine learning theory that can apply to solving practical problems.

## EDUCATION

---

### Xidian University

M.S., Department of Electronic Engineering

Advisor: [Prof. Bo Chen](#)

Xi'an, China

Sep 2021 - Present

### Xidian University

B.S., Department of Electronic Engineering

Xi'an, China

Sep 2017 - Jul 2021

## PROJECTS

---

- **PyDPM** (core contributor)  
A python library focuses on constructing **Deep Probabilistic Models (DPMs)** Sep 2022 - Present

## AWARDS AND HONORS

---

- **Bronze Medal**, The 2019 ICPC Asia-East Continent Final, Xi'an 2019
- **Bronze Medal**, The 2019 ICPC Asia Regional Contest, Yinchuan Site 2019
- **Silver Medal**, The 2019 ICPC China Shaanxi Provincial Programming Contest 2019
- **1st Prize (9/325)**, The 17th Programming Contest of Xidian University 2019
- **Scientific and Technological Progress Scholarship**, Xidian University 2018

## PUBLICATIONS (\* denotes equal contribution)

---

### Preprint

- [1] **Xinyang Liu\***, Dongsheng Wang\*, Miaoge Li, Zhibin Duan, Yishi Xu, Bo Chen and Mingyuan Zhou  
**Patch-Token Aligned Bayesian Prompt Learning for Vision-Language Models**  
*arXiv preprint arXiv:2303.09100 (2023)*

## Conference and Journal Publications

- [2] Miaoge Li\*, Dongsheng Wang\*, **Xinyang Liu**, Zequn Zeng, Ruiying Lu, Bo Chen and Mingyuan Zhou  
**PatchCT: Aligning Patch Set and Label Set with Conditional Transport for Multi-Label Image Classificatio**  
*The IEEE/CVF International Conference on Computer Vision, (ICCV 2023)*
- [3] Zhibin Duan\*, **Xinyang Liu\***, Yudi Su, Yishi Xu, Bo Chen and Mingyuan Zhou  
**Bayesian Progressive Deep Topic Model with Knowledge Informed Textual Data Coarsening Process**  
*In the 40th International Conference on Machine Learning, (ICML 2023)*