Summer 2026 REU Opportunity

Discrete Diffusion Models & Diffusion LLMs

PI: Prof. Ruqi Zhang, Department of Computer Science, Purdue University

Funding: NSF CISE REU — $9,000 stipend + $1,000 travel

Duration: 10 weeks, Summer 2026 (in-person at Purdue or remote)

Project

Diffusion models are transforming generative modeling, and recent work is pushing them into discrete domains, such as text and code, as a competitor to autoregressive LLMs. This project contributes to our group's research on **discrete diffusion** and **diffusion LLMs**, including training and inference efficiency, corruption schedules, and hybrid discrete-continuous diffusion. The student will work with Prof. Zhang and a senior PhD mentor, aiming for a conference paper.

Who should apply

- Strong Python/PyTorch skills
- Solid foundations in probability, linear algebra, and machine learning
- Curiosity about generative models and LLMs; prior diffusion or LLM experience is a bonus, not required
- Currently enrolled undergraduate; must be a U.S. citizen, U.S. national, or U.S. permanent resident (NSF CISE REU eligibility)

How to apply

Email **ruqiz@purdue.edu** with the following:

- CV / resume
- Unofficial transcript
- Short paragraph on your interests and fit

Application deadline: Friday, May 29, 2026