Anushka Tiwari

Email LinkedIn Github

Summary

PhD student in Data Science specializing in deep learning; interests include continual/lifelong learning, transfer learning, NLP, GNNs, and recommender systems.
Recent work *GRID: Scalable Task-Agnostic Prompt-Based Continual Learning for Language Models framework that boosts backward transfer and reduces prompt-pool growth using gradient-driven selection/compression and task-aware decoding on long sequences.*
Advised by Prof. Kaiyi Ji.

Education

The State University of New York at Buffalo **Aug 2023 – Present**
PhD in Computational and Data-Enabled Sciences, GPA 3.750/4 *Buffalo, New York, United States*

Indian Institute of Technology Indore **Aug 2021 – June 2023**
Master of Science in Mathematics , GPA 8.32/10 *Madhya Pradesh, India*

ARSD, University of Delhi **Aug 2018 – June 2021**
Bachelor of Science in Mathematics , GPA 9.216/10 *New Delhi, India*

Publications

- **GRID: Scalable Task-Agnostic Prompt-Based Continual Learning for Language Models**
  Anushka Tiwari*, Sayantan Pal, Rohini K. Srihari, Kaiyi Ji* *Submitted ICLR 2026*
- **Heterogeneous Sequel-Aware Graph Neural Networks for Sequential Learning**
  Anushka Tiwari*, Haimonti Dutta, Shahrzad Khanizadeh* *arXiv*
- **Content-based Art Recommendation Using Multimodal Graph Neural Networks**
  Haimonti Dutta, ***Anushka Tiwari*** *ICKG 2024*
- **Enhancing imbalance learning: A novel slack-factor fuzzy SVM approach**
  M Tanveer, ***Anushka Tiwari****, Mushir Akhtar, Chin-Teng Lin* *IEEE TETCI*

Professional Experience

CHISQUARE LABS **Kerala, India**
Data Science Intern *June 2024 – August 2024*

- Developed an AI-driven patient-review prioritization model that analyzed only ∼50% of records yet detected ∼90% of Alzheimer's Disease cases, halving workload and improving efficiency, cost, and outcomes.

Technical Skills

Languages: Python, SQL
Libraries/Frameworks: PyTorch, Transformers, Huggingface, NLTK, Numpy, Scikit-learn, Matplotlib, Seaborn, Pandas, Spacy, Deep Graph

Achievements

- **Stood at an all India rank of 258 IIT JAM Mathematics exam.** IIT JAM.