

# Anup Shakya

A 4<sup>th</sup> year PhD student actively looking for industry-level research opportunities.

## CONTACT

3708 Kearney Ave  
Memphis, TN  
38111

E-mail: [anupshakya07@gmail.com](mailto:anupshakya07@gmail.com)  
Phone: +1 (901)-450-9675  
Google Scholar: [2Xne72EAAAAAJ](https://scholar.google.com/citations?user=2Xne72EAAAAAJ)  
LinkedIn: [anupshakya07](https://www.linkedin.com/in/anupshakya07)

## WORK EXPERIENCE

### University of Memphis

Jan 2020 — Present

#### Graduate Research Assistant

- Working full-time in UofM Machine Learning Research Lab
- Gained research experience working on several research projects. Carrying out various experiments with state-of-the-art ML models, scrutinizing the results and producing research works publishable in top-tier scientific journals.

### Deerwalk Services

Dec 2015 — Jan 2020

#### Software Engineer Lead

- Gained substantial professional experience in software development along with critical skills like time management, critical thinking, leadership, and effective communication.
- Worked extensively in development of Health Care web applications, leading different projects like Real Time Integration, Incentive Manager and Provider portal which dealt with real-time data flow between different in-house web applications.

## TECHNICAL SKILLS

- Programming Languages like: C, Java, Groovy, JavaScript, Python
- ML Frameworks like: PyTorch and TensorFlow
- Grails and Spring Framework, Hibernate, MySQL, Elastic Search
- Amazon Web Services like: Lambda, S3 and Redshift

## EDUCATION

### Computer Science (Ph.D.)

2020 — Present

University of Memphis

Currently in 4<sup>th</sup> year with GPA: 3.99  
Graduating in August 2024

### Computer Science (Master's)

2020 — 2022

University of Memphis

GPA: 3.98

## RESEARCH INTERESTS

Neuro-Symbolic AI, Machine Learning, Intelligent Tutoring Systems, Natural Language Processing and Neural Network Verification

## PUBLICATIONS

- Anup Shakya, Abisha Thapa Magar, Somdeb Sarkhel and Deepak Venugopal, **On the Verification of Embeddings using Hybrid Markov Logic**, Proceedings of the 23<sup>rd</sup> IEEE International Conference on Data Mining (ICDM 2023), 2023 (accepted as main-track conference paper).
- Abisha Thapa Magar, Anup Shakya, Somdeb Sarkhel and Deepak Venugopal, **Verifying Relational Explanations: A Probabilistic approach**, Proceedings of 2023 IEEE International Conference on Big Data, 2023 (accepted as main-track conference paper).
- Anup Shakya, Vasile Rus and Deepak Venugopal, **Scalable and Equitable Math Problem Solving Strategy Prediction in Big Educational Data**, Proceedings of the 16<sup>th</sup> International Conference on Educational Data Mining (EDM 2023), 2023 (<https://github.com/anupshakya07/attn-scaling>).
- Anup Shakya, Vasile Rus and Deepak Venugopal, **Student Strategy Prediction using a Neuro-Symbolic Approach**, Proceedings of the 14th International Educational Data Mining Conference (EDM 21), 2021 (<https://github.com/anupshakya07/SSPM>).
- Anup Shakya, Vasile Rus, Stephen Fancsali, Steve Ritter and Deepak Venugopal, **NeTra: A Neuro-Symbolic System to Discover Strategies in Math Learning**, Proceedings of the 3rd Learner Data Institute Workshop in conjunction with EDM, 2022.

## ACHIEVEMENTS

- 2nd Position in 18<sup>th</sup> Annual CS Research Symposium (2023) at The University of Memphis
- Peter I Neathery Fellowship 2021