

PRAKAMYA MISHRA

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EDUCATION

- University of Massachusetts Amherst** Sep. 2021 - May 2023
Masters of Science in Computer Science (Data Science Concentration)
Amherst, MA, USA
- Shiv Nadar University** Sep. 2016 - May 2020
B.Tech. in Computer Science & Engineering
Noida, UP, India

WORK EXPERIENCE

- AMD** Jan. 2024 - Present
Applied Research Engineer
Seattle, WA, USA
- Working on training, fine-tuning, and aligning large language models (LLMs) by exploring novel architectures and large-scale training techniques to reach state-of-the-art performance.
 - Designing and implementing novel research ideas and improving LLMs to influence future hardware and software direction at AMD AI.
- UMass BioNLP Lab** Jan. 2023 - Dec. 2024
Research Assistant
Amherst, MA, USA
- Proposed novel RLHF approaches that utilizes LLMs to generate high-quality feedback aimed at enhancing factual consistency in clinical note summarization.
- Amazon, Alexa NLU Team** Jan. 2023 - Jul. 2023
Graduate Student Researcher
Amherst, MA, USA
- Proposed a novel clustering-based few-shot sampling approach for improving the performance of the present SOTA keyphrase extraction model in cross-domain setting.
- Amazon, Alexa SLU Team** May 2022 - Aug. 2022
Applied Scientist Intern
Boston, MA, USA
- Developed a novel multi-cross attention transformer model for incorporating multi-modal input signals from multiple transformer encoders to improve Alexa SLU pipeline performance by x7 times.

SELECTED PUBLICATIONS

- SYNFAC-EDIT: Synthetic Imitation Edit Feedback for Factual Alignment in Clinical Summarization - Prakamya Mishra***, Zonghai Yao*, Parth Vashisht, Feiyun Ouyang, Beining Wang, Vidhi Dhaval Mody, Hong Yu. *Under Review @ ACL 2024*
- Clustering-based Sampling for Few-Shot Cross-Domain Keyphrase Extraction - Prakamya Mishra***, Lincy Pattanaik*, Arunima Sundar*, Nishant Yadav, Mayank Kulkarni. *Findings of EACL 2024*
- Synthetic Imitation Edit Feedback for Factual Alignment in Clinical Summarization - Prakamya Mishra***, Zonghai Yao*, Shuwei Chen, Beining Wang, Rohan Mittal, Hong Yu. *Workshop on SyntheticData4ML @ NeurIPS 2023*
- NeuralNERE: Neural Named Entity Relationship Extraction for End-to-End Climate Change Knowledge Graph Construction - Prakamya Mishra**, Rohan Mittal. *Workshop on Tackling Climate Change with Machine Learning @ ICML 2021*
- Bi-ISCA: Bidirectional Inter-Sentence Contextual Attention Mechanism for Detecting Sarcasm in User Generated Noisy Short Text - Prakamya Mishra**, Saroj Kaushik, Kuntal Dey. *Workshop on Modelling and Reasoning in Context @ IJCAI 2021*
- STEPS-RL: Speech-Text Entanglement for Phonetically Sound Representation Learning - Prakamya Mishra**. *PAKDD 2021*

SKILLS

Languages: Java, Python, C, HTML/CSS, JavaScript, SQL, Git, Shell, LATEX
Machine Learning & Data Science: Pytorch, Huggingface, Large Language Models (LLM), GPT, Transformers, TensorFlow, Keras, Numpy, Pandas, Sklearn, Matplotlib, Spacy, NLTK, Spark, Scala, Apache Airflow, Hadoop, Deep Learning, NLP, ML Algorithms, Text Processing