Shriya Atmakuri

satmakuri@umass.edu
617-816-1256
She/Her
/shriya-atmakuri
/ShriyaA

Education

University of Massachusetts Amherst Jan 2020 – Dec 2022
MS Computer Science *Amherst, MA*

Research

UMass Amherst Information Extraction and Synthesis Lab

- Conducted research on region-based word embeddings and aided development of the Word2Box model.
- Published: "Word2Box: Capturing Set-Theoretic Semantics of Words using BoxEmbeddings", ACL 2022

UMass Amherst Industry Mentorship Program

- Tested robustness of explanation methods commonly applied to NLP models through extensive experimentation
- Published: "Robustness of Explanation Methods for NLP Models", Workshop on Trustworthy Artificial Intelligence in conjunction with ECML/PKDD 22

Work Experience

J.P. Morgan Chase & Co. | Machine Learning Center of Excellence Jun 2022 – Aug 2022
AI & Data Science Associate *New York, NY*

- Conducted experimentation on multi-document summarization and headline generation which was a new area for the team.
- Performed all stages of model development including literature review, data analysis, prototyping, fine-tuning, evaluation, ablation experiments, and writing annotation guidelines.
- Significantly reduced training time and compute from state-of-the-art model without much loss in performance. Applied and compared various language models (PEGASUS, BART, GPT-3) to the task.

Microsoft | Azure Backup Team Jun 2018 – Apr 2020
Software Engineer *Hyderabad, India*

- Developed in C# and worked on both microservices and client-side agent.
- Designed and implemented a feature to manage agent configuration through services which reduced resolution time of customer support cases.
- Streamlined and sped up deployment of the backup service in new regions using Azure Pipeline.

Projects

Using Question Generation with Conversational Question Answering

- Implemented a BERT-based Conversational Question Answering system and a GPT-2 based Question Generation model. Experimented with retraining the QA system using generated questions.

Supervised Clustering for Fact-Checked Claim Retrieval

- Tackled the task of fact- checking input claims given a set of previously fact-checked claims. Used siamese-style BERT dual-encoder architecture for clustering.

Skills

Languages & Libraries Python, C#, Java, PyTorch, HuggingFace Transformers, spacy, scikit-learn, nltk, gensim, seaborn, pandas, pytorch-lightning

Areas Natural Language Processing, Deep Learning, Machine Learning, Data Science

Coursework Advanced Natural Language Processing, Conversational AI, Machine Learning, Neural Networks, Computational Psycholinguistics