Anvesh Rao Vijjini

Research Interests

Currently interested in Alignment, Bias, RAG, Summarization, Question Answering, Commonsense, Inter-personal Relationships and Conflicts.

Education

2021 - PhD in Computer Science,

present University of North Carolina at Chapel Hill.

Advisor: Dr. Snigdha Chaturvedi

2017 - 2021 MS in Computational Linguistics,

International Institute of Information Technology, Hyderabad.

Advisor: Dr. Radhika Mamidi

2013 - 2017 B.Tech in Computer Science,

International Institute of Information Technology, Hyderabad.

Awarded Dean's List for being in the top 10% of the class in academics for Monsoon 2015 and Spring 2016 semesters.

Experience

May 2023 - Research Intern at Bloomberg.

July 2023 Worked on document expansion with large language models for improving document retrieval

Improving document retrieval by using large language models to generate and integrate
a diverse set of questions into documents (document expansion), enriching content for
improved search results.

May 2022 - Research Intern at Adobe.

July 2022 Worked on transcript segmentation at Project Blink, Adobe's video sharing platform.

 Proposed a pretraining strategy that improves transcript segmentation by training in a curated order, with samples arranged in increasing similarity. Published our work at EACL 2023 (Findings)

August 2018 - Lead Engineer (Research) at Samsung R&D Institute India-Bangalore.

August 2021 Worked at Bixby Intelligence, Samsung's voice assistant.

- Automated WER Prediction of Bixby's ASR.
- Automated Conversation Quality Estimation for the performance evaluation of Bixby conversations.
- Data Augmentation to eschew manual annotations.
- Authored research papers based on Text classification and Domain Adaptation at EMNLP 2019, CICLing 2019, NLDB 2019, NLDB 2020, ICPR 2020 and EACL 2021.

Spring **Teaching Assistant**, *Natural Language Application*.

The course covers popular Machine Translation (statistical) methods at the time such as IBM Models, Phrase-Based Models, and Neural Machine Translation.

Monsoon Teaching Assistant, Natural Language Processing.

2016 and An overview of various areas in NLP such as Tokenization, Parts Of Speech tagging, Natural 2017 Language Generation and Parsing.

Volunteer

- Reviewer for NAACL 2023, EMNLP 2022, ACL 2020, EMNLP 2020, NLP+CSS
 EMNLP 2020, EACL 2021, ACL 2021, EMNLP 2022, EACL 2023.
- Student Volunteer awarded for EACL 2023.
- Sessions Chair for NLDB 2020
- Board member for STEM Pride of the Triangle (stempride.web.unc.edu)

Conference Publications

- December Perspectives on Blame and Innocence: Analysis of Large Language Mod-2023 els for Social Judgment in Narratives, Anvesh Rao Vijjini, Rakesh Menon, Shashank Shrivastava and Snigdha Chaturvedi. Under Review
- October 2023 PARROT: Zero-Shot Narrative Reading Comprehension via Parallel Reading, Chao Zhao, Anvesh Rao Vijjini, and Snigdha Chaturvedi.

 EMNLP 2023 (Findings).
- January 2023 Curricular Next Conversation Prediction Pretraining for Transcript Segmentation, Anvesh Rao Vijjini, Hanieh Deilamsalehy, Franck Dernoncourt and Snigdha Chaturvedi.

 EACL 2023 (Findings).
- October 2022 **Towards Inter-character Relationship-driven Story Generation**, *Anvesh Rao Vijjini*, Faeze Brahman and Snigdha Chaturvedi.

 EMNLP 2022.
 - April 2021 WER-BERT: Automatic WER Estimation with BERT in a Balanced Ordinal Classification Paradigm, Anvesh Rao Vijjini*, Akshay Krishna Sheshadri* and Sukhdeep Kharbanda.

 EACL 2021.
- January 2021 **Sequential Domain Adaptation through Elastic Weight Consolidation for Sentiment Analysis**, Avinash Madasu and **Anvesh Rao Vijjini**.

 ICPR 2020
 - June 2020 A SentiWordNet Strategy for Curriculum Learning in Sentiment Analysis,

 Anvesh Rao Vijjini*, Kaveri Anuranjana* and Radhika Mamidi.

 NLDB 2020
 - June 2020 A Position Aware Decay Weighted Network For Aspect Based Sentiment Analysis, Avinash Madasu and Anvesh Rao Vijjini.

 NLDB 2020
 - November Sequential Learning of Convolutional Features for Effective Text Classifica-2019 tion, Avinash Madasu and Anvesh Rao Vijjini. EMNLP-IJCNLP 2019

- June 2019 **Gated Convolutional Neural Networks for Domain Adaptation**, Avinash Madasu and **Anvesh Rao Vijjini**.

 NLDB 2019
- April 2019 HindiRC: A Dataset for Reading Comprehension in Hindi, Anvesh Rao Vijjini*, Kaveri Anuranjana* and Radhika Mamidi.

 CICLing 2019
- April 2019 Effectiveness of Self Normalizing Neural Networks for Text Classification ,

 Avinash Madasu and Anvesh Rao Vijjini.

 CICLing 2019
- August 2018 Twitter corpus of Resource-Scarce Languages for Sentiment Analysis and Multilingual Emoji Prediction, Nurendra Choudhary, Rajat Singh, Anvesh Rao Vijjini and Manish Shrivastava.

 COLING 2018

Workshop Publications

- April 2021 Analyzing Curriculum Learning for Sentiment Analysis along Task Difficulty, Pacing and Visualization Axes, Anvesh Rao Vijjini*, Kaveri Anuranjana* and Radhika Mamidi.

 Workshop on Computational Approaches to Subjectivity, Sentiment & Social Media Analysis (WASSA) at EACL 2021.
- August 2019 Hindi Question Generation Using Dependency Structures, Anvesh Rao Vijjini*, Kaveri Anuranjana* and Radhika Mamidi.

 Workshop on Humanizing AI (HAI) at IJCAI 2019.
- August 2018 Towards Enhancing Lexical Resource and Using Sense-annotations of OntoSenseNet for Sentiment Analysis, Sreekavitha Parupalli, Anvesh Rao Vijjini and Radhika Mamidi.

 Workshop on Semantic Deep Learning (SemDeep-3) at COLING 2018.
 - July 2018 BCSAT: A Benchmark Corpus for Sentiment Analysis in Telugu Using Word-level Annotations, Sreekavitha Parupalli, Anvesh Rao Vijjini and Radhika Mamidi. Student Research Workshop (SRW) at ACL 2018.
 - July 2018 **Towards Automation of Sense-type Identification of Verbs in OntoSenseNet**, Sreekavitha Parupalli, **Anvesh Rao Vijjini** and Radhika Mamidi. Workshop on Natural Language Processing for Social Media (SocialNLP) at ACL 2018.

Theses

MS Theses Towards Adapting Curriculum Learning for Sentiment Analysis: Challenges and Analyses, Anvesh Rao Vijjini and Radhika Mamidi.