Shafiuddin Rehan Ahmed

Personal Website

🤗 Hugging Face

RESEARCH INTERESTS

Natural Language Processing \cdot Information Extraction and Retrieval \cdot Knowledge Graphs \cdot Machine Learning \cdot Deep Learning \cdot Neuro-Symbolic NLP \cdot Generative Models \cdot Comprehension

EDUCATION

MS and Ph.D., Computer Science and Engineering

University of Colorado, Boulder, USA

Aug 2017 - May 2024

Bachelor of Technology, Computer Science and Engineering

Indian Institute of Technology, Hyderabad, India

Aug 2008 - May 2012

TECHNICAL SKILLS

Programming: Python, Java, C#, C++

IDE: VSCode, PyCharm

Deep Learning: PyTorch

RESEARCH EXPERIENCE (5+ YEARS)

Graduate Research Assistant (Python)

University of Colorado, Boulder, USA

Jan 2024 - May 2024

Contributions: SemEval 2024 · ACL 2024

Machine Learning Engineer Intern - Remote (Python)

ExplosionAl GmbH (makers of spaCy), Berlin, Germany

May 2023 - Aug 2023

Contributions: EACL_{SD} 2024 · LREC-COLING 2024b · Anno Tool 3

Machine Learning Engineer Intern - Remote (Python)

ExplosionAI GmbH (makers of spaCy), Berlin, Germany

May 2022 - Aug 2022

Contributions: LAW 2023 · Anno Tool 2

Graduate Research Assistant (Java, Python)

University of Colorado, Boulder, USA

Jan 2018 - May 2022

Contributions: TAC 2018 · TAC 2019 · ACL_f 2023 · EMNLP_{SD} 2023 ·

LREC-COLING 2024a · Anno Tool 1 ·

Software Engineering Intern II (Python)

Sopris Health, USA

June 2018 - Aug 2018

Senior R&D Engineer (Python)

HP Inc. R&D, Bangalore, India

Aug 2016 - Aug 2017

Contributions: US Patent 2018

Software Developer (C#)

HP Inc. R&D, Bangalore, India

Aug 2012 - Aug 2016

TEACHING EXPERIENCE

Natural Language Processing Teaching Assistant	Aug 2023 - Dec 2023
Fundamentals of Software Engineering Teaching Assistant	Jan 2023 - May 2023
Natural Language Processing Teaching Assistant	Aug 2022 - Dec 2022
Numerical Linear Algebra Student Assistant	Aug 2017 - Dec 2017

PATENTS

1. Shameed Sait M A, Shafiuddin Rehan Ahmed, Niranjan Damera Venkata. *Providing Solutions Using Stochastic Modelling*. en. 2018. URL: https://patents.google.com/patent/US20210049489A1/

AWARDS

- 1. Best Frame Recall for Cross Document Event Coreference Resolution in Text Analysis Conference, 2019
- 2. 3rd Place Outstanding Poster In-Progress Research, Graduate Students' Research expo., 2018-2019
- 3. Merit-cum-Means Scholarship for Undergraduate Studies, 2009-2012

PAPERS

- Shafiuddin Rehan Ahmed, Zhiyong Wang, George Baker, Kevin Stowe, and James H. Martin. "Generating Harder Cross-document Event Coreference Resolution Datasets using Metaphoric Paraphrasing". In: Proceedings of the Association for Computational Linguistics: ACL 2024. Bangkok, Thailand: Association for Computational Linguistics, Aug. 2024
- 2. Micah Zhang, Shafiuddin Rehan Ahmed, and James H. Martin. "FtG-CoT at SemEval-2024 Task 9: Solving Sentence Puzzles Using Fine-Tuned Language Models and Zero-Shot CoT Prompting". In: Proceedings of the 18th International Workshop on Semantic Evaluation (SemEval-2024). Mexico City, Mexico: Association for Computational Linguistics, 2024
- 3. Shafiuddin Rehan Ahmed, George Arthur Baker, Evi Judge, Michael Reagan, Kristin Wright-Bettner, Martha Palmer, and James H. Martin. "Linear Cross-document Event Coreference Resolution with X-AMR". in: Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024). Torino, Italia: ELRA and ICCL, May 2024, pp. 10517–10529. URL: https://aclanthology.org/2024.lrec-main.920
- 4. Abhijnan Nath, Huma Jamil, Shafiuddin Rehan Ahmed, George Baker, Rahul Ghosh, James H. Martin, Nathaniel Blanchard, and Nikhil Krishnaswamy. *Multimodal Cross-Document Event Coreference Resolution Using Linear Semantic Transfer and Mixed-Modality Ensembles.* 2024. arXiv: 2404.08949 [cs.CL]
- 5. Shafiuddin Rehan Ahmed, Jon Cai, Martha Palmer, and James H. Martin. "X-AMR Annotation Tool". In: Proceedings of the 18th Conference of the European Chapter of the Association for Computational Linguistics: System Demonstrations. Malta: Association for Computational Linguistics, Mar. 2024. URL: https://arxiv.org/abs/2403.15407

- 6. Jon Cai, Shafiuddin Rehan Ahmed, Julia Bonn, Kristin Wright-Bettner, Martha Palmer, and James H. Martin. "CAMRA: Copilot for AMR Annotation". In: Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing: System Demonstrations. Singapore: Association for Computational Linguistics, Dec. 2023, pp. 381–388. URL: https://aclanthology.org/2023.emnlp-demo.35
- 7. Shafiuddin Rehan Ahmed, Abhijnan Nath, Michael Regan, Adam Pollins, Nikhil Krishnaswamy, and James H. Martin. "How Good Is the Model in Model-in-the-loop Event Coreference Resolution Annotation?" In: *Proceedings of the 17th Linguistic Annotation Workshop (LAW-XVII)*. Toronto, Canada: Association for Computational Linguistics, July 2023, pp. 136–145. URL: https://aclanthology.org/2023.law-1.14
- 8. Shafiuddin Rehan Ahmed, Abhijnan Nath, James H. Martin, and Nikhil Krishnaswamy. "2*n is better than n^2 : Decomposing Event Coreference Resolution into Two Tractable Problems". In: Findings of the Association for Computational Linguistics: ACL 2023. Toronto, Canada: Association for Computational Linguistics, July 2023, pp. 1569–1583. URL: https://aclanthology.org/2023.findings-acl.100
- 9. Cecilia Mauceri, Shafiuddin Rehan Ahmed, and Timothy O'Gorman. "RAMFIS System Report TAC 2018." In: Proceedings of the 2018 Text Analysis Conference, TAC 2018, Gaithersburg, Maryland, USA, November 13-14, 2018. NIST, 2018

REVIEWER DUTIES

ACL 2024 · EMNLP 2023, 24 · StarSEM 2023, 24

COURSES

Deep Learning \cdot Natural Language Processing \cdot Algorithms \cdot Machine Learning \cdot Programming Languages \cdot Probabilistic Models \cdot Numerical Linear Algebra \cdot Transformer Models \cdot Probabilistic Programming Languages