Aseem Srivastava, Ph.D.

Postdoctoral Researcher at MBZUAI, UAE

♥ Abu Dhabi, UAE | ⊕ as3eem.github.io | ♀ as3eem@gmail.com | ♥ as3eem | ☎ as3eem | ♪ +918736977760

An AI researcher working on Natural Language Processing (NLP) for social good. Aseem's research focuses on Large Language Models (LLMs) to develop methods for dialogue/user modeling, controlled text generation, and summarization for applications like virtual counseling and online human behavior analysis. With 8+ publications in top-tier venues such as KDD, WWW, EMNLP, WSDM, and JMIR, he is enthusiastic about applying his skills and experience as a research scientist or applied researcher to solve complex problems.

EXPERIENCE

• Mohamed bin Zayed University of Artificial Intelligence (MBZUAI) Postdoctoral Researcher

Advisors: Prof. Thamar Solorio and Prof. Monojit Choudhury

Research: Digital Personas and LLM Behavioral Perception Across Languages and Cultures

• Mentra

Consulting Head of Research & Tech

- Led three tech teams overseeing LLM/AI pipeline, cloud infrastructure, and software development.

- Democratized generative AI for evidence-based counseling using RAG, raising user engagement by 50%.

- Reduced unsafe generations by 80% through a sustainable AI safeguarding pipeline for privacy and safety.
- Optimized LLM training and deployment, cutting costs by 3x and saving \$6,500 per month on AWS.
- Led a research team of NLP researchers and clinical psychologists, driving innovative grant initiatives and working in collaboration with the UAE University and mental health experts.

• Mpathic.ai

Research Intern (PhD)

Advisors: Dr. Grin Lord and Prof Alison Cerezo

- Conducted research on counseling dialogue summarization and published our findings at KDD 2022.
- Optimized team workflows to develop an end-to-end pipeline, creating a novel methodology from scratch and overseeing its implementation for in-house deployment.

Analytics Vidhya

Data Science Intern

July 2019 - August 2019 Gurgaon, Harayana, India

August 2022 - January 2023

USA (Remote)

- Spearheaded the development of machine learning and deep learning models for an in-house portal. In addition, we worked on deep neural networks to facilitate better recommendation frameworks.

SKILLS AND INTERESTS

Research Interests: Computational Social Science, Natural Language Processing, Large Language Models; Psycholinguistics: Human Behavior, Social Media, Multimodal Interactions **Skills:** PyTorch, LLMOps, Python, Tensorflow, Git, AWS, Azure, SQL, Data Structures and Algorithms

PUBLICATIONS

C=CONFERENCE, J=JOURNAL, P=PREPRINT

Conferences

- [C.6] Abdullah Mazhar, Zuhair Hasan Shaik, Aseem Srivastava, Polly Ruhnke, Lavanya Vaddavalli, Sri Keshav Katragadda, Shweta Yadav, Md Shad Akhtar. Figurative-cum-Commonsense Knowledge Infusion for Multimodal Mental Health Meme Classification. ACM Web Conference (WWW), 2025.
- [C.5] Aseem Srivastava, Smriti Joshi, Tanmoy Chakraborty, Md Shad Akhtar. Knowledge Planning in Large Language Models for Domain-Aligned Counseling Summarization. Conference on Empirical Methods in Natural Language Processing (EMNLP), 2024.
- [C.4] Aseem Srivastava, Ishan Pandey, Md Shad Akhtar, Tanmoy Chakraborty. Response-act Guided Reinforced Dialogue Generation. In the Proceedings of ACM Web Conference (WWW), 2023.
- [C.3] Aseem Srivastava, Tharun Suresh, Grin Lord, Md. Shad Akhtar, Tanmoy Chakraborty. Counseling Summarization using Mental Health Knowledge Guided Utterance Filtering. Proceedings of the 28th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), 2022.

January 2024 - August 2024 Dubai, UAE (Hybrid)

April 2025 - Present

Abu Dhabi, UAE

- [C.2] Usha Lokala, Aseem Srivastava, Triyasha Ghosh Dastidar, Tanmoy Chakraborty, Md Shad Akthar, Maryam Panahiazar, Amit Sheth. A Computational Approach to Understand Mental Health from Reddit: Knowledge-aware Multitask Learning Framework. Proceedings of the International AAAI Conference on Web and Social Media (ICWSM), 2022.
- [C.1] Ganeshan Malhotra, Abdul Waheed, Aseem Srivastava, Md. Shad Akhtar, Tanmoy Chakraborty. Speaker & Time-aware Joint Contextual Learning for Dialogue-act Classification in Conversations. Proceedings of ACM International Conf. on Web Search and Data Mining (WSDM), 2022.

Journals/Transactions

- [J.2] Aseem Srivastava, Tanya Gupta, Alison Cerezo, Grin Lord, Md Shad Akhtar, Tanmoy Chakraborty. Critical Behavioral Traits Foster Peer Engagement in Online Mental Health Communities. *Public Library of Science* (PLOS One), 2025. [*I.F.*= 2.9]
- [J.1] Prottay Kumar Adhikary, Aseem Srivastava, Shivani Kumar, Salam Michael Singh, Puneet Manuja, Jini K Gopinath, Vijay Krishnan, Swati Kedia, Koushik Sinha Deb, Tanmoy Chakraborty. Exploring the Efficacy of Large Language Models in Summarizing Mental Health Counseling Sessions: A Benchmark Study Journal of Medical Internet Research (JMIR), 2024. [I.F.= 4.8]

Preprints

- [P.2] Aseem Srivastava, Zuhair Hasan Shaik, Tanmoy Chakraborty, Md Shad Akhtar. Trust Modeling in Counseling Conversations: A Benchmark Study. *ArXiv*, 2025.
- [P.1] Aseem Srivastava, Gauri Naik, Alison Cerezo, Tanmoy Chakraborty, Md. Shad Akhtar. Sentimentguided Commonsense-aware Response Generation for Counseling *ArXiv*, 2025.

EDUCATION

• Doctor of Philosophy (Ph.D.) Indraprastha Institute of Information Technology, Delhi (IIIT-Delhi)	2020 - <i>March</i> 2025 Delhi, India		
• Thesis: Towards Enhanced Conversational Dynamics for Effective Virtual Therapist-Assistive Counseling			
 Advisor: Prof. Md. Shad Akhtar and Prof. Tanmoy Chakraborty 			
• Bachelor of Technology (B.Tech) in Computer Science and Engineering <i>Kamla Nehru Institute of Technology (KNIT), Sultanpur</i>	2016 - 2020 Sultanpur, India		
 Thesis: Amazon Review Analysis to Guage User Sentiments 			
 Advisor: Prof. Rafeeq Ahmad 			
ORGANIZED TUTORIALS AND WORKSHOPS	T=TUTORIAL		

[T.1] Aseem Srivastava, Neeraj, Yash Atri, Shivani Kumar, Shad Akhtar, Tanmoy Chakraborty. Building Blocks of AI-Driven Counseling. 20th International Conference on Natural Language Proc. (ICON), 2023.

COMMUNITY SERVICE		Teaching Assistant	
Paper Reviewer WWW, ARR, EMNLP, ACM Tran. Healthcare	2024	Data Science & Deep Learning TA for Post-graduate Diploma at IIIT-Delhi	2021, 2022
Paper Reviewer ARR, EMNLP	2023	Deep Learning TA at IIIT-Delhi	2022
Paper Reviewer KDD, EMNLP, ICON	2023	Natural Language Processing TA at IIIT-Delhi	2021

INVITED TALKS AND SYMPOSIUMS

• Research Week with Google	2023, 2024, 2025
Got three back-to-back invitations to attend and present our work.	Google Deepmind, Bangalore, India
 Artificial Intelligence Summer School (AISS) Invited to present a talk on "Advancing GenAI Modeling in Mental Healthcare" 	2024 IIIT Delhi, India
 India ML Reading Group Got invited to present a talk on the "Dialogue Modeling" 	2024 Virtual (YouTube)
• ACM-India's Symposium for Academic Research and Careers for Students	s 2023
Lightning Talk and Poster Presentation	NISER Bhubhaneshwar, India
• Cord.ai	2023
Got invited to present a talk on the "Role of the Conversational Agent's Component	in Digital Counseling" Virtual

AWARDS AND ACHIEVEMENTS

- 2023 Received Google Research Grant to present our WWW '23 paper in Austin, USA.
- 2022 Received ACM India Grant to present our KDD '22 paper in Washington DC, USA.
- 2019 Placed top 9% (N=8K) IIT-Madras Alumni Assoc. Hackearth ML challenge leaderboard (Acc=99.63%).

REFERENCES

References are available on request.