

Shivani Kumar, Ph.D.

Postdoctoral Research Fellow at University of Michigan

📍 Ann Arbor, MI, USA | 🌐 [shivanik96.github.io](https://github.com/shivanik96) | ✉ kshivan@umich.edu | 📱 [shivanik96](https://www.linkedin.com/in/shivanik96)

RESEARCH INTEREST

I am a researcher in NLP and human-AI interaction. I design, analyze, and evaluate AI systems with a focus on human-centered dimensions of language, including affective and socio-cultural factors such as emotions, morality, and culture. My work investigates how these systems understand, express, and explain these complex phenomena. Looking ahead, I aim to extend this research to rhetorical strategies, exploring how human-specific dimensions are leveraged by AI systems to persuade or influence human decision-making.

EXPERIENCE

- **University of Michigan** May 2024 - Present
Postdoctoral Research Fellow
Ann Arbor, Michigan, USA
Advisor: Prof David Jurgens
Topic: Moral Values, Cultural Influence, and Large Language Models
- **Adobe Inc.** January 2023 - June 2023
PhD Intern
Noida, Uttar Pradesh, India
Mentors: Dr. Sumit Bhatia, Milan Aggarwal
Topic: Improving the efficacy of Conversational Systems

PUBLICATIONS

C=CONFERENCE, J=JOURNAL, P=PREPRINT

- [P.2] Sualeha Farid, Jayden Lin, Zean Chen, **Shivani Kumar**, and David Jurgens. [One Model, Many Morals: Uncovering Cross-Linguistic Misalignments in Computational Moral Reasoning](#). *ArXiv Preprint*, 2025.
- [C.7] **Shivani Kumar**, David Jurgens. [Are Rules Meant to be Broken? Understanding Multilingual Moral Reasoning as a Computational Pipeline with UniMoral](#). *Proceedings of the 63rd Annual Meeting of the Association for Computational Linguistics (ACL)*, 2025. 🏆 **Best resource paper**.
- [P.1] Johnathan Ivey*, **Shivani Kumar***, Jiayu Liu*, Hua Shen*, Sushrita Rakshit*, Rohan Raju*, Hao-tian Zhang*, Aparna Ananthasubramaniam*, Junghwan Kim*, Bowen Yi*, Dustin Wright*, Abraham Israeli*, Anders Giovanni Møller*, Lechen Zhang*, David Jurgens. [Real or Robotic? Assessing Whether LLMs Accurately Simulate Qualities of Human Responses in Dialogue](#). *ArXiv Preprint*, 2024.
- [J.6] **Shivani Kumar**, Sumit Bhatia, Milan Aggarwal, Tanmoy Chakraborty. [Dialogue Agents 101: A Beginner's Guide to Critical Ingredients for Designing Effective Conversational Systems](#) *Natural Language Processing (formerly Natural Language Engineering)*, 2024.
- [C.6] **Shivani Kumar**, Md Shad Akhtar, Erik Cambria, Tanmoy Chakraborty. [SemEval 2024–Task 10: Emotion Discovery and Reasoning its Flip in Conversation \(EDiReF\)](#) *The North American Chapter of the Association for Computational Linguistics (NAACL)*, 2024.
- [J.5] 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.
- [J.4] Priyadarshini Rai, Atishay Jain, **Shivani Kumar**, Divya Sharma, Neha Jha, Smriti Chawla, Abhijit Raj, Apoorva Gupta, Sarita Poonia, Angshul Majumdar, Tanmoy Chakraborty, Gaurav Ahuja, Debarka Sengupta. [Literature mining discerns latent disease gene relationships](#) *Bioinformatics*, 2024.
- [C.5] **Shivani Kumar**, Rishabh Gupta, Md Shad Akhtar, Tanmoy Chakraborty. [Adding SPICE to Life: Speaker Profiling in Multiparty Conversations](#) *Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING)*, 2024.
- [C.4] **Shivani Kumar**, Tanmoy Chakraborty. [Harmonizing Code-mixed Conversations: Personality-assisted Code-mixed Response Generation in Dialogues](#). *Conference of the European Chapter of the Association for Computational Linguistics (EACL) - Findings*, 2024.

- [C.3] **Shivani Kumar**, Ramaneswaran S, Md Shad Akhtar, Tanmoy Chakraborty. [From Multilingual Complexity to Emotional Clarity: Leveraging Commonsense to Unveil Emotions in Code-Mixed Dialogues](#). *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2023.
- [J.3] **Shivani Kumar**, Shubham Dudeja, Md Shad Akhtar, Tanmoy Chakraborty. [Emotion Flip Reasoning in Multiparty Conversations](#). *IEEE Transactions on Artificial Intelligence*, 2023.
- [C.2] **Shivani Kumar**, Ishani Mondal, Md Shad Akhtar, Tanmoy Chakraborty. [Explaining \(Sarcastic\) Utterances to Enhance Affect Understanding in Multimodal Dialogues](#). *Proceedings of the 37th AAAI Conference on Artificial Intelligence (AAAI 2023)*.
- [C.1] **Shivani Kumar***, Atharva Kulkarni*, Md Shad Akhtar, Tanmoy Chakraborty. [When did you become so smart, oh wise one?! Sarcasm Explanation in Multi-modal Multi-party Dialogues](#). *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (ACL 2022)*.
- [J.2] **Shivani Kumar**, Anubhav Shrimal, Md Shad Akhtar, Tanmoy Chakraborty. [Discovering Emotion and Reasoning its Flip in Multi-Party Conversations using Masked Memory Network and Transformer](#). *Knowledge-Based Systems*, 2022.
- [J.1] Manjot Bedi*, **Shivani Kumar***, Md Shad Akhtar, Tanmoy Chakraborty. [Multi-modal Sarcasm Detection and Humor Classification in Code-mixed Conversations](#). *IEEE Transactions on Affective Computing*, 2021.

EDUCATION

- **Indraprastha Institute of Information Technology, Delhi (IIIT-Delhi)** 2019 - 2024
Doctor of Philosophy (Ph.D.) Delhi, India
 - Thesis Title: Understanding and Explaining Affective Traits in English and Code-mixed Conversations
 - Advisor: Prof. Tanmoy Chakraborty
- **University of Delhi – Department of Computer Science** 2017 - 2019
Masters of Sciences (M.Sc.) in Computer Science Delhi, India
 - Thesis Title: Using Complex Networks for Generating Concept Maps
 - Advisor: Prof. Vasudha Bhatnagar
 - Aggregate: 87.5% (GPA: 3.5/4.0)
- **University of Delhi – Shaheed Sukhdev College of Business Studies** 2014 - 2017
Bachelors of Sciences (B.Sc.) in Computer Science Delhi, India
 - Aggregate: 92.5% (GPA: 3.7/4.0)
- **Queen Marys School, Tis Hazari** 2002 - 2014
School Education Delhi, India
 - **Senior Secondary**, CBSE: 91.2% (3.6/4.0 GPA)
 - **Secondary**, CBSE: 91.2% (3.6/4.0 GPA)

GRANTS, AWARDS, AND ACHIEVEMENTS

- **Selected for the short-term scholarship program of DAAD Postdoc-NeT-AI** Oct 2025
Includes a three month grant for the awardee and the institute and travel allowance.
- **Selected for the University of Michigan Postdoctoral Association Travel Award** Aug 2025
For attending ACL 2025.
- **Selected as a DAAD AInet fellow for the Postdoc-NeT-AI** Oct 2024
Includes a virtual networking week and a one-week networking visit to Germany.
- **Microsoft Travel Grant, ACM-Woman Travel Grant** Nov 2023
For Travel to Singapore for EMNLP 2023.
- **Google Travel Grant, Microsoft Travel Grant, ACM-India Travel Grant (IARCS)** Apr 2022
For Travel to Dublin, Ireland for ACL 2022.
- **Junior Research Fellowship (JRF)** Jul 2019
Qualified UGC-NET, a standardized test by the University Grants Commission (UGC), India.

INVITED TALKS

- **Annual German Academic International Network (GAIN) Conference** 2025
Science Slam about “Moral Reasoning using UNIMORAL” Boston, USA
- **3rd Symposium on NLP for Social Good** 2025
Talk on “Moral Reasoning using UNIMORAL” Virtual Event
- **Data Science/Computational Social Science (DS/CSS) seminar series** 2024
Science “Affective Traits of Natural Language” University of Michigan, USA
- **ACM-India’s Symposium for Academic Research and Careers for Students** 2023
Lightning Talk and Poster Presentation NISER Bhubhaneshwar, India
- **International Conference on Natural Language Processing (ICON)** 2023
Tutorial on “Building Blocks of AI-Driven Mental Health Counseling” University of Goa, India
- **Google Research Week** 2024, 2023
Poster Presentation Bangalore, India

GUEST LECTURES

- **Lamarr Institute NLProc Colloquium** 2025
Title: “Affective Traits of Natural Language” University of Bonn, Germany
- **Applied Machine Learning course (SI-670)** 2024
Title: “Machine Learning for Sarcasm Analysis” University of Michigan, Ann Arbor, Michigan, USA
- **Research Methods in Social Science and Design (RMSSD) course (SSH201)** 2022, 2021, 2019
Title: “Social Media Analytics” IIIT-Delhi, India

IN NEWS

- **The Science Archive** [🔗](#) Mar 2025
Talks about our ACL 2025 paper - “Are Rules Meant to be Broken? Understanding Multilingual Moral Reasoning as a Computational Pipeline with UNIMORAL”
- **UMSI Research Roundup** [🔗](#) Mar 2025
Talks about our ACL preprint - “Are Rules Meant to be Broken? Understanding Multilingual Moral Reasoning as a Computational Pipeline with UNIMORAL”
- **UMSI Research Roundup** [🔗](#) Dec 2024
Talks about our preprint - “Real or Robotic? Assessing Whether LLMs Accurately Simulate Qualities of Human Responses in Dialogue.”

POSITIONS OF RESPONSIBILITY

- **Co-Organiser at EDiReF** 2024
Shared Task in SemEval Workshop @ NAACL
- **Program Committee at ICON** 2022
International Conference on Natural Language Processing
- **Program Committee at CONSTRAINT** 2022
Workshop on Combating Online Hostile Posts in Regional Languages during Emergency Situation @ ACL
- **Co-Organiser at ACSS** 2021, 2020
Workshop on AI for Computational Social Systems
- **Co-Organiser at COFAD** 2020
Workshop on Combating Fraud Activities using Data Science

TEACHING ASSISTANT

- **Social Network Analysis** 2023, 2022
National Programme on Technology Enhanced Learning (NPTEL) – an Indian MOOCs Platform
- **Social Network Analysis** 2022
Teaching Assistant at IIIT-Delhi
- **Machine Learning** 2021
Teaching Assistant at IIIT-Delhi
- **Natural Language Processing** 2021
Teaching Assistant for PG Diploma in Data Science and AI at IIIT-Delhi

COMMUNITY SERVICE

• Area Chair <i>EACL, LREC</i>	2026
• Reviewer <i>ICLR</i>	2026
• Area Chair <i>ACL, EMNLP</i>	2025
• Reviewer <i>ICLR, ARR, Neural Networks</i>	2025
• Reviewer <i>ARR, ASONAM, WiNLP, Cluster Computing, IEEE Transactions on Artificial Intelligence</i>	2024
• Reviewer <i>ARR, EMNLP</i>	2023
• Reviewer <i>EMNLP, ICON, CHI, DAFSAA</i>	2022
• Student Mentor <i>For the “Desh ka Mentor” program of Delhi Government. Mentored four high school students.</i>	2022
• Rapporteur <i>For The International Colloquium on Ethics and Governance of Autonomous AI Systems</i>	2019

ADDITIONAL INFORMATION

Fluent Languages: • English • Hindi

Interests: • Crocheting • Photography • Reading • Writing • Art & Craft

REFERENCES

1. **Prof David Jurgens**
Associate Professor, School of Information
University of Michigan
Email: jurgens@umich.edu
Relationship: Postdoc Advisor
2. **Prof Tanmoy Chakraborty**
Associate Professor, Dept. of Electrical Engineering (Computer Technology Group); Associate Faculty
Member, Yardi School of Artificial Intelligence
Indian Institute of Technology Delhi (IIT Delhi), India
Email: tanchak@iitd.ac.in, chak.tanmoy.iit@gmail.com*
Relationship: PhD Advisor
3. **Dr. Md Shad Akhtar**
Assistant Professor, Department of Computer Science and Engineering
Indraprastha Institute of Information Technology (IIIT) Delhi
Email: shad.akhtar@iiitd.ac.in
Relationship: Mentor and Professor
4. **Prof Vasudha Bhatnagar**
Professor, Dept. of Computer Science
University of Delhi
Email: vbhatnagar@cs.du.ac.in
Relationship: Master's Advisor
5. **Dr. Sumit Bhatia**
Senior Machine Learning Scientist, Media and Data Science Research Lab
Adobe Inc.
Email: sumit.bhatia@adobe.com, sumit.summit@gmail.com*
Relationship: Internship Mentor