Prachi Jain

p6.jain@gmail.com, Website: https://p6jain.github.io/prachijain/

Postdoctoral Researcher

Indian Institute of Technology, Delhi

EDUCATION

Ph.D. (Computer Science and Engineering)

July 2014 - October 2022

Area: Natural Language Processing, Deep Learning

Advisor: Dr Mausam, Professor IIT Delhi Dr Soumen Chakrabarti, Professor IIT Bombay

Indian Institute of Technology, Delhi

CGPA : 8.7/10

M.Tech. (Computer Science and Engineering)

August 2011 - December 2013

Specialization: Information Security

Advisor: Dr Ponnurangam Kumaraguru, Assistant Professor IIIT Delhi

Indraprastha Institute of Information Technology, Delhi

CGPA : 9.75/10

B.Tech (Hons.) (Computer Science and Engineering)

July 2007 - August 2011

Maharashi Dayanand University, Haryana

Cumulative Aggregate: 80.1%

EXPERIENCE

Microsoft Research, Bangalore: Post-doctoral Researcher

October 2022 - Present

- Host: Dr Sunayana Sitaram
- Ethical AI and Fairness in Large Language Models. Benchmarking multi-lingual capabilities of LLM.

Facebook, London: Research Intern

August 2018 - October 2018

- Guide: Dr Daniel Bennett.
- Internationalized models for malicious account detection.

Alcatel-Lucent (Bell Labs), Dublin: Research Intern

June 2013 - July 2013

- Guide: Dr Alessandra Sala, Research Scientist Alcatel-Lucent Dublin.
- Handling and Analyzing huge Hive datasets from a leading Telecom Provider.

University Of Southern California, Los Angeles: Research Intern

May 2012 - July 2012

• Guide: Dr Kristina Lerman, Project Leader ISI USC.

IIT Delhi: Research Associate

 $January\ 2014-April\ 2014$

• Guide: Prof Mausam, Associate Professor IIT Delhi.

IIIT Delhi: Research Assistant

 $January\ 2013-May\ 2013$

• Guide: Dr Ponnurangam Kumaraguru, Assistant Professor IIIT Delhi.

Teaching Assistant

August 2011 – 2019

- IIT Delhi: Machine Learning, Artificial Intelligence, Learning Probabilistic Graphical Model, Natural Language Processing (basic and advanced level)
- IIIT Delhi: Mobile Computing, Computer Networks, Digital Electronics.

PreCog Group at IIIT Delhi: Student Researcher

January 2012 – December 2013

PUBLICATIONS

• Ashutosh Sathe, **Prachi Jain**, and Sunayana Sitaram. A Unified Framework and Dataset for Assessing Gender Bias in Vision-Language Models. arXiv (2024).

- Sanchit Ahuja, Divyanshu Aggarwal, Varun Gumma, Ishaan Watts, Ashutosh Sathe, Millicent Ochieng, Rishav Hada, Prachi Jain et al. MEGAVERSE: benchmarking large language models across languages, modalities, models and tasks. NAACL 2024.
- Prachi Jain, Ashutosh Sathe, Varun Gumma, Kabir Ahuja, and Sunayana Sitaram.
 MAFIA: Multi-Adapter Fused Inclusive LanguAge Models. EACL 2024.
- Kabir Ahuja, Harshita Diddee, Rishav Hada, Millicent Ochieng, Krithika Ramesh,
 Prachi Jain, Akshay Nambi et al. MEGA: Multilingual evaluation of generative AI.
 Proceedings of EMNLP 2023.
- Soumen Chakrabarti, Harkanwar Singh, Shubham Lohiya, **Prachi Jain**, Mausam. Joint Completion and Alignment of Multilingual Knowledge Graphs. EMNLP 2022.
- Harkanwar Singh, Soumen Chakrabarti, Prachi Jain, Sharod Roy Choudhury, Mausam. Multilingual Knowledge Graph Completion With Joint Relation and Entity Alignment. Automated Knowledge Base Construction (AKBC). Online. October 2021.
- Prachi Jain, Sushant Rathi, Mausam, Soumen Chakrabarti. Knowledge Base Completion: Baseline strikes back (Again). arXiv (2020).
- Prachi Jain, Sushant Rathi, Mausam, Soumen Chakrabarti. Temporal Knowledge Base Completion: New Algorithms and Evaluation Protocols. Proceedings of EMNLP 2020.(Acceptance Rate – 24%)
- Prachi Jain, Pankaj Kumar, Mausam, Soumen Chakrabarti. Type-Sensitive Knowledge Base Inference Without Explicit Type Supervision. Proceedings of ACL. 2018. (Acceptance Rate – 24%)
- Prachi Jain, Shikhar Murty, Mausam, Soumen Chakrabarti. Mitigating the Effect of Out-of-Vocabulary Entity Pairs in Matrix Factorization for KB Inference. Proceedings of IJCAI. 2018. (Acceptance Rate: 20%)
- Prachi Jain, Mausam. Knowledge Guided Linguistic Rewrites for Inference Rule Verification. Proceedings of NAACL-HLT. 2016. (Acceptance rate 29%)
- Prachi Jain. Call Me MayBe: Understanding Nature and Risks of Sharing Mobile Numbers on Online Social Networks. IIIT Delhi Master's thesis, 2013.
- Prachi Jain, Paridhi Jain, Ponnurangam Kumaraguru. Call Me MayBe: Understanding Nature and Risks of Sharing Mobile Numbers on Online Social Networks. Proceedings of the first ACM conference on Online social networks. ACM, 2013.(Acceptance rate 15.9%)
- Kristina Lerman, Prachi Jain, Rumi Ghosh, Jeon-Hyung Kang, Ponnurangam Kumaraguru. Limited Attention and Centrality in Social Networks. Social Intelligence and Technology (SOCIETY), 2013 International Conference on. IEEE, 2013.

COMMUNITY SERVICE

Active Reviewer for EMNLP, ACL, NeurIPS, AAAI, IJCAI, AKBC, ICML, ICLR.

AWARDS

- Received SAP Grant for attending the 7th Heidelberg Laureate Forum (2019), Heidelberg, Germany.
- Received student travel grant for attending the Deep Learning and Reinforcement Learning School (2019), Edmonton, Canada.
- Received Google Research travel grant and ACL Student travel grant for attending ACL 2018, Melbourne, Australia.
- Received Microsoft Research travel grant and IJCAI Student travel grant for attending IJCAI 2018, Sweden.
- Received Microsoft Research travel grant and Xerox Research travel grant for attending NAACL 2016, San Diego.
- Awarded Tata Consultancy Services PhD Fellowship for duration of 4 years from 2016.
- Received Google grant for attending the Lisbon Machine Learning School (LxMLS 2015), Portugal.
- Received best project award in Graduate course on Natural Language Processing (NLP) at IIT Delhi. Project name TweetIE: Extracting Relations from Twitter.
- Received ACM COSN Student travel grant to attend COSN 2013, Boston.
- Selected for Lisbon Machine Learning School (LxMLS 2015), Portugal.
- Selected for IBM Winter School 2013.
- Selected for the prestigious Viterbi India Research program 2012, to do funded research internship at USC, Los Angeles, CA.
- Full tuition fee waiver for Masters studies at IIIT Delhi (2011)
- Scholarship for securing 3rd position in B.Tech program.

TECHNICAL SKILLS

Languages & Tools: Python, machine learning tools (pytorch, scikit-learn), Git

RELEVANT COURSE WORK

- Advance Natural Language Processing (IIT Delhi)
- Natural Language Processing (IIT Delhi)
- Probabilistic Graphical Models (IIT Delhi)
- Special Topics in Numerical Algorithm (IIT Delhi)
- Machine Learning (IIT Delhi)
- Information Retrieval (IIIT Delhi)

REFERENCES

- Sunayana Sitaram, Microsoft Research, India
- Prof. Mausam, (IIT Delhi)
- Prof. Soumen Chakrabarti (IIT Bombay)
- Prof. Ponnurangam Kumaraguru (IIIT Hyderabad)