

PERSONAL
INFORMATION

Email : jain.sar@northeastern.edu
Google Scholar : <https://scholar.google.com/citations?user=ng6th5cAAAAJ>
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RESEARCH
INTERESTS

Interpretability Methods for ML Models, Efficient Data Collection

EDUCATION

Northeastern University, Khoury College of Computer Sciences

PhD, Computer Science (Summer 2022), advised by Byron C. Wallace

Delhi Technological University, Department of Computer Engineering

B.Tech (4 yrs - Computer Engineering), Aggregate Percentage: 82.67/100

CONFERENCE
PUBLICATIONS

1. Sheng Zhang, Cliff Wong, Naoto Usuyama, Sarthak Jain, Tristan Naumann, and Hoifung Poon. **Modular Self-Supervision for Document-Level Relation Extraction**. In Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing, 2021
2. Eric Lehman, Sarthak Jain, Karl Pichotta, Yoav Goldberg, and Byron Wallace. **Does BERT Pretrained on Clinical Notes Reveal Sensitive Data?** In Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, 2021
3. Pouya Pezeshkpour, Sarthak Jain, Byron Wallace, and Sameer Singh. **An Empirical Comparison of Instance Attribution Methods for NLP**. In Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, 2021
4. Sarthak Jain, Sarah Wiegrefe, Yuval Pinter, and Byron C Wallace. **Learning to Faithfully Rationalize by Construction**. Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics, 2020
5. Sarthak Jain, Madeleine van Zuylen, Hannaneh Hajishirzi, and Iz Beltagy. **SciREX: A Challenge Dataset for Document-Level Information Extraction**. Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics, 2020
6. Jay DeYoung, Sarthak Jain, Nazneen Fatema Rajani, Eric Lehman, Caiming Xiong, Richard Socher, and Byron C. Wallace. **ERASER: A Benchmark to Evaluate Rationalized NLP Models**. In Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics, 2020
7. Sarthak Jain and Byron C Wallace. **Attention is not Explanation**. In Proceedings of the 2019 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, Volume 1 (Long and Short Papers), 2019
8. Babak Esmaili, Hao Wu, Sarthak Jain, Alican Bozkurt, N Siddharth, Brooks Paige, Dana H Brooks, Jennifer Dy, and Jan-Willem Meent. **Structured Disentangled Representations**. In The 22nd International Conference on Artificial Intelligence and Statistics, 2019
9. Ramin Mohammadi, Sarthak Jain, Stephen Agboola, Ramya Palacholla, Sagar Kamarthi, and Byron C Wallace. **Learning to Identify Patients at Risk of Uncontrolled Hypertension Using Electronic Health Records Data**. AMIA Summits on Translational Science Proceedings, 2019, 2019
10. Sarthak Jain, Edward Banner, Jan-Willem van de Meent, Iain J Marshall, and Byron C Wallace. **Learning Disentangled Representations of Texts with Application to Biomedical Abstracts**. In Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing, 2018

11. Sarthak Jain and Shashank Batra. **Cross lingual sentiment analysis using modified BRAE**. In Proceedings of the 2015 Conference on Empirical Methods in Natural Language Processing, 2015
12. Ramin Mohammadi, Sarthak Jain, Amir T Namin, Melissa Scholem Heller, Ramya Palacholla, Sagar Kamarthi, and Byron Wallace. **Predicting Unplanned Readmissions Following a Hip or Knee Arthroplasty: Retrospective Observational Study**. JMIR medical informatics, 8(11):e19761, 2020

WORKSHOP
PUBLICATIONS

1. Sarthak Jain, Ramin Mohammadi, and Byron C Wallace. **An Analysis of Attention over Clinical Notes for Predictive Tasks**. In Proceedings of the 2nd Clinical Natural Language Processing Workshop, 2019
2. Sarthak Jain, Xun Peng, and Byron C. Wallace. **Detecting Twitter posts with Adverse Drug Reactions using Convolutional Neural Networks**. In SMM4H@AMIA, 2017
3. Sarthak Jain. **Question answering over knowledge base using factual memory networks**. In Proceedings of the NAACL Student Research Workshop, 2016

PREPRINTS

1. Pouya Pezeshkpour, Sarthak Jain, Sameer Singh, and Byron C. Wallace. **Combining Feature and Instance Attribution to Detect Artifacts**, 2021

SERVICE

Reviewer: TALLIP, NAACL (2019), NeurIPS (2019,2020), AMIA Informatics Summit (2020, 2021), W-NUT 2019, BMC MIDM, ACL (2019, 2020, 2021), EMNLP (2020, 2021), EACL (2021), AAI (2021), NAACL (2021), ICLR (2020), ICML (2020)

WORK
EXPERIENCE

Research Intern May 2021 to August 2021
 – Adobe Research - Document Intelligence Lab
 Using Influence functions for Structured Prediction Tasks to identify inconsistent annotations in training data

Research Intern June 2020 to August 2020
 – Project Hanover, Microsoft Health Futures
 Document Level Relation Extraction from Biomedical Literature with Distant Supervision

Research Intern June 2019 to August 2019
 – Semantic Scholar, Allen Institute for Artificial Intelligence
 Structured Results Extraction from Machine Learning Literature using Distant Supervision from PapersWithCode Dataset

Machine Learning Intern Jun-Aug 2016, Jun-Aug 2017
 – Machine Learning Group, HPCC Systems, USA
 Implemented Singular Value Decomposition in distributed shared nothing environment.
 Implemented Tests for Linear And Logistic Regression Modules

REFERENCES

Byron Wallace (PhD Advisor)
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Hoifung Poon (Internship Advisor)
 Senior Director of Biomedical NLP, Microsoft Health Futures
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Varun Manjunatha (Internship Advisor)
 Research Scientist, Adobe Research Maryland
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