

TUHIN CHAKRABARTY

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EDUCATION

Columbia University, New York

Ph.D. in Computer Science (Major in Natural Language Processing)

Amazon PhD Fellow

Advisor : **Smaranda Muresan**

August 2020 - 2024

GPA: 4.29

Columbia University, New York

Master of Science (Major in Natural Language Processing)

Advisor : **Kathy Mckeown**

Department of Computer Science

August 2017 - 2019

GPA : 3.91

Jadavpur University, Kolkata, India

Bachelor of Engineering in Computer Science

July 2010 - June 2014

GPA : 3.85

AWARDS, FELLOWSHIPS AND MEDIA

- Quoted in The Hollywood Reporter *Why AI Isn't Funny — At Least Not Yet*
- Receipt of *Amazon PhD Fellowship for 2022,2023*
- NYC Media Lab x New York Times R&D *Computational Journalism Fellowship, 2021*

PUBLICATIONS

PAPERS UNDER SUBMISSION

1. **Creativity Support in the Age of Large Language Models: An Empirical Study Involving Emerging Writers**

Tuhin Chakrabarty*, Vishakh Padmakumar* , Faeze Brahman, Smaranda Muresan

Under submission at CHI 2024 (Conference)

2. **Art or Artifice? Large Language Models and the False Promise of Creativity**

Tuhin Chakrabarty, Philippe Laban, Divyansh Agarwal, Smaranda Muresan, Chien-Sheng Wu

Under submission at CHI 2024 (Conference)

ARCHIVAL JOURNAL PAPERS

1. **It's not Rocket Science: Interpreting Figurative Language in Narratives**

Tuhin Chakrabarty, Yejin Choi and Vered Shwartz

Transactions of the Association for Computational Linguistics (TACL), 2022 (Journal)

1. **Learning to Follow Object-Centric Image Editing Instructions Faithfully**
Tuhin Chakrabarty, Kanishk Singh, Arkadiy Saakyan, Smaranda Muresan
 Findings of The 2023 Conference on Empirical Methods in Natural Language Processing (Long)
2. **NORMSAGE: Multi-Lingual Multi-Cultural Norm Discovery from Conversations On-the-Fly**
 Yi Fung, **Tuhin Chakrabarty**, Hao Guo, Owen Rambow, Smaranda Muresan, Heng Ji
 Proceedings of The 2023 Conference on Empirical Methods in Natural Language Processing (Long)
3. **I Spy a Metaphor: Large Language Models and Diffusion Models Co-Create Visual Metaphors**
Tuhin Chakrabarty*, **Arkadiy Saakya***, **Olivia Winn***, Artemis Panagopoulou, Yue Yang, Marianna Apidianaki, Smaranda Muresan
 Findings of The 2023 Association of Computational Linguistics (Long)
4. **Help me write a Poem - Instruction Tuning as a Vehicle for Collaborative Poetry Writing**
Tuhin Chakrabarty*, **Visakh Padmakumar*** and He He
 Proceedings of The 2022 Conference on Empirical Methods in Natural Language Processing (Long)
5. **FLUTE: Figurative Language Understanding through Textual Explanations**
Tuhin Chakrabarty, Arkadiy Saakyan, Debanjan Ghosh and Smaranda Muresan
 Proceedings of The 2022 Conference on Empirical Methods in Natural Language Processing (Long)
6. **Fine-tuned Language Models are Continual Learners**
Thomas Scialom*, **Tuhin Chakrabarty*** and Smaranda Muresan
 Proceedings of The 2022 Conference on Empirical Methods in Natural Language Processing (Long)
7. **Multitask Instruction-based Prompting for Fallacy Detection**
 Tariq Alihindi, **Tuhin Chakrabarty**, Elena Musi and Smaranda Muresan
 Proceedings of The 2022 Conference on Empirical Methods in Natural Language Processing (Long)
8. **CONSISTENT: Open-Ended Question Generation From News Articles**
Tuhin Chakrabarty, Justin Lewis and Smaranda Muresan
 Findings of The 2022 Conference on Empirical Methods in Natural Language Processing (Long)
9. **Don't Go Far Off: An Empirical Study on Neural Poetry Translation**
Tuhin Chakrabarty, Arkadiy Saakyan and Smaranda Muresan
 Proceedings of The 2021 Conference on Empirical Methods in Natural Language Processing (Long)
10. **Implicit Premise Generation with Discourse-aware CommonsenseKnowledge Models**
Tuhin Chakrabarty, Aadit Trivedi and Smaranda Muresan
 Proceedings of The 2021 Conference on Empirical Methods in Natural Language Processing (Short)
11. **Metaphor Generation with Conceptual Mappings**
 Kevin Stowe, **Tuhin Chakrabarty**, Nanyun Peng, Smaranda Muresan and Iryna Gurevych
 Proceedings of The Joint Conference of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (ACL-IJCNLP 2021) (Long)
12. **COVID-Fact: Fact Extraction and Verification of Real-World Claims concerning the COVID-19 pandemic**
 Arkadiy Saakyan, **Tuhin Chakrabarty** and Smaranda Muresan

Proceedings of The Joint Conference of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (ACL-IJCNLP 2021) (Long)

13. Figurative Language in Recognizing Textual Entailment

Tuhin Chakrabarty, Debanjan Ghosh, Adam Poliak and Smaranda Muresan

Findings of The Joint Conference of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (ACL-IJCNLP 2021) (Short)

14. MERMAID: Metaphor Generation with Symbolism and Discriminative Decoding

Tuhin Chakrabarty, Xurui Zhang, Smaranda Muresan and Nanyun Peng

Proceedings of The 2021 Annual Conference of the North American Chapter of the Association for Computational Linguistics (Long)

15. ENTRUST: Argument Reframing with Language Models and Entailment

Tuhin Chakrabarty, Christopher Hidey and Smaranda Muresan

Proceedings of The 2021 Annual Conference of the North American Chapter of the Association for Computational Linguistics (Long)

16. Generating similes effortlessly like a Pro: A Style Transfer Approach for Simile Generation

Tuhin Chakrabarty, Smaranda Muresan and Nanyun Peng

Proceedings of The 2020 Conference on Empirical Methods in Natural Language Processing (Long)

17. Content Planning for Neural Story Generation with Aristotelian Rescoring

Seraphina Goldfarb-Tarrant, **Tuhin Chakrabarty**, Ralph Weischedel and Nanyun Peng

Proceedings of The 2020 Conference on Empirical Methods in Natural Language Processing (Long)

18. R³: Reverse, Retrieve, and Rank for Sarcasm Generation using CommonSense Knowledge

Tuhin Chakrabarty, Debanjan Ghosh and Smaranda Muresan and Nanyun Peng

Proceedings of The 2020 Annual Conference of the Association for Computational Linguistics (Long)

19. DeSePtion: Dual Sequence Prediction and Adversarial Examples for Improved Fact-Checking

Christopher Hidey, **Tuhin Chakrabarty**, Tariq Alhindi, Siddharth Varia, Kriste Krstovski, Mona Diab and Smaranda Muresan

Proceedings of The 2020 Annual Conference of the Association for Computational Linguistics (Long)

20. AMPERSAND: Argument Mining for PERSuAsive oNline Discussions

Tuhin Chakrabarty, Christopher Hidey, Smaranda Muresan, Kathy McKeown and Alyssa Hwang
Proceedings of The 2019 Conference on Empirical Methods in Natural Language Processing and 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP), Hong Kong

** Accepted as a poster at Natural Language, Dialog and Speech (NDS) Symposium, New York Academy Of Sciences (Long)*

21. IMHO Fine Tuning Improves Claim Detection

Tuhin Chakrabarty, Christopher Hidey, Kathy McKeown

Proceedings of The 2019 Annual Conference of the North American Chapter of the Association for Computational Linguistics, (NAACL) (Short)

22. Discourse Relation Prediction: Revisiting Word Pairs with Convolutional Networks

Siddharth Varia, Christopher Hidey, **Tuhin Chakrabarty**

Proceedings of The 20th Annual meeting of Special Interest Group on Discourse and Dialogue (SIGDIAL), 2019 (Long)

WORKSHOP, DEMO

1. Identifying Distributional Perspective Differences from Colingual Groups

Yufei Tian, **Tuhin Chakrabarty**, Fred Morstatter, Nanyun Peng

Proceedings of The 9th International Workshop on Natural Language Processing for Social Media, NAACL 2021 (Long)

2. DiSCoL: Toward Engaging Dialogue Systems through Conversational Line Guided Response Generation

Sarik Ghazarian, Zixi Liu, **Tuhin Chakrabarty**, Xuezhe Ma, Aram Galstyan, Nanyun Peng

Proceedings of The 2021 Annual Conference of the North American Chapter of the Association for Computational Linguistics (Demo)

3. Pay “Attention” to your Context when Classifying Abusive Language

Tuhin Chakrabarty, Kilol Gupta and Smaranda Muresan

Proceedings of The 3rd Abusive Language Workshop, ACL 2019 (Long)

4. The Answer is Language Model Fine-tuning

Tuhin Chakrabarty and Smaranda Muresan

Proceedings of The 13th International Workshop on Semantic Evaluation, NAACL-HLT, Minneapolis, NAACL 2019 (Short)

5. Robust Document Retrieval and Individual Evidence Modeling for Fact Extraction and Verification

Tuhin Chakrabarty, Tariq Alihindi and Smaranda Muresan

Proceedings of The 1st Workshop on Fact Extraction and Verification, EMNLP 2018 (Short)

WORK EXPERIENCE

Research Intern, Google DeepMind

August 2023- November 2023

Structured Explanations for Automatic Evaluation of Attribution with Large Language Models.

Mentors : **David Reitter and Hannah Rashkin**

Research Intern, Salesforce Research

May 2023 - August 2023

Human-centered evaluation for Creative Writing.

Mentors : **Philippe Laban and Chien-Sheng Wu**

Summer Intern PhD, Allen Institute of Artificial Intelligence

May 2021 - August 2021

Explanatory models for Narrative Understanding involving figurative language.

Mentors : **Vered Shwartz and Yejin Choi**

Summer Intern PhD, IBM Research

April 2020 - July 2020, YorkTown Heights, NY

Generative models for Question Answering.

Machine Learning Engineer, UBER

Jan 2016 - August 2017, Hyderabad, India

Improving transparency by preventing partner and credit card fraud in emerging markets using machine learning techniques.

RESEARCH EXPERIENCE

Research Assistant
Advisor: Smaranda Muresan
Columbia University

August 2020 - Present

- Distilling Commonsense Reasoning in Text Generation
- Creative and Collaborative Text Generation (Long and Short Form)

Research Assistant
Advisor: Nanyun Peng and Smaranda Muresan
Information Sciences Institute, University Of Southern California & Columbia University

August 2019 - August 2020

- Creative text generation

Research Assistant
Advisor: Kathy Mckeown and Smaranda Muresan
Columbia University

August 2017 - August 2019

- Learning from less labeled data for improved Dialogue and Discourse Understanding
- Argumentation (Structures and Semantics)
- Adversarial Attacks in Veracity/ Fact checking models

MENTORING EXPERIENCE

Kanishk Singh
Master student, Columbia University.
Topics: Text-based Editing of Diffusion models
Publication Venue : **EMNLP 2023**

Jan 2023 - July 2022

Arkadiy Saakyan (<https://asaakyan.github.io/>)
PhD student, Columbia University.
Topics : Counter-claim Generation for Fact-Checking and Neural Machine Translation
Publication Venue : **ACL 2021, EMNLP 2021**

August 2020 - August 2021

Aadit Trivedi (<https://www.linkedin.com/in/aadit-trivedi>)
Georgia Tech Freshman.
Topics : Implicit Premise Generation for Enthymeme Reconstruction
Publication Venue : **EMNLP 2021**

January 2021 - August 2021

Julia Guo
Columbia College Senior.
Topics : Neural Machine Translation

August 2021-Present

INVITED TALKS

Art or Artifice? Large Language Models and the False Promise of Creativity, Stanford NLP Seminar

Art or Artifice? Large Language Models and the False Promise of Creativity, Guest Lecture at Kathy Mckeown's Class COMS 6998 Language Generation and Summarization, Columbia University, September 2023

I Spy a Metaphor: Large Language Models and Diffusion Models Co-Create Visual Metaphors, UMASS NLP Group, February 2023

Controllability in Figurative Language, Guest Lecture at Kathy Mckeown's Class COMS 6998 Language Generation and Summarization, Columbia University, September 2022

Fine-tuned Language Models are Continual Learners, ETH Zurich NLP group, August 2022

CONSISTENT: Controllable Open Ended Question Generation from News Articles, New York Times, January 2022

The curious case of Figurative Language University of Utah Data Science Seminar, April 2022

Controlled Generation for Figurative Language and Argument Reframing, ETS Research, November 2021

RELEVANT COURSEWORK

Machine Learning, Natural Language Processing, Deep Learning, NLP in Context: Computational Models of Social Meaning, Analysis Of Algorithm, Fundamentals of Speech Recognition, Conversational AI, Multilingual Technologies and Language Diversity, Language and Mind

PROFESSIONAL ACTIVITIES

- Tutorial on Creative Language Generation at EMNLP 2023 with Vishakh Padmakumar, He He, and Nanyun Peng.
- Organizing committee for the 3rd Figurative Language Processing Workshop coheld at EMNLP 2022 and the 1st Shared Stories and Lessons learned workshop at EMNLP 2022
- Program Committee at EMNLP 2023, ACL 2023, EACL 2023, AACL 2023, ACL 2022, EMNLP 2022, AAAI 2022, EACL 2023, ACL 2021, EMNLP 2021, AAAI 2022, ACL 2020, EMNLP 2020, EMNLP 2021, NAACL 2021, *SEM 2021, AAAI 2020, *SEM 2020
- Program Committee at 1st, 2nd and 3rd Workshop on Fact Extraction and Verification
- Program Committee at 4th Abusive Language Workshop.
- Program Committee at 6th Workshop on Noisy User-Generated Text (W-NUT)

REFERENCES

- **Smaranda Muresan**
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Columbia University, New York, NY 10027
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- **Yejin Choi**
Brett Helsel Professor
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- **Kathy McKeown**
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- **He He**
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