Maria Teleki

SUMMARY

I am a third-year PhD Student in Computer Science at Texas A&M University, advised by Prof. James Caverlee. My work is supported by an Avilés-Johnson Fellowship.

My research focuses on algorithms for natural language processing, with a special focus on spoken contexts. I work with large language models, automatic speech recognition systems, and psycholinguistic theories.

EDUCATION

2022 - Present	PhD Computer Science at Texas A&M University	(GPA: 4.0/4.0)
2017 - 2022	B.S. Computer Science at Texas A&M University	(GPA: 3.9/4.0)
	- Summa Cum Laude	

Preprints

Dong, X., **Teleki, M.**, Caverlee, J., (2024). "A Survey on LLM Inference-Time Self-Improvement". In: arXiv.

PUBLICATIONS

- **Teleki, M.**, Dong, X., Liu, H., Caverlee, J., (2025). "Masculine Defaults via Gendered Discourse in Podcasts and Large Language Models". In: *ICWSM* 2025.
- **Teleki, M.**, Dong, X., Kim, S., Caverlee, J., (2024). "Comparing ASR Systems in the Context of Speech Disfluencies". In: *INTERSPEECH*. URL: https://www.isca-archive.org/interspeech_2024/teleki24_interspeech.pdf.
- **Teleki, M.**, Dong, X., Caverlee, J., (2024). "Quantifying the Impact of Disfluency on Spoken Content Summarization". In: *Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation*. URL: https://aclanthology.org/2024.lrec-main.1175.pdf.
- Chaudhury, R., **Teleki, M.**, Dong, X., Caverlee, J., (2024). "DACL: Disfluency Augmented Curriculum Learning for Fluent Text Generation". In: *Joint International Conference on Computational Linguistics, Language Resources and Evaluation*. URL: https://aclanthology.org/2024.lrec-main.385.pdf.
- Dong, X., Zhu, Z., Wang, Z., **Teleki, M.**, Caverlee, J., (2023). "Co2PT: Mitigating Bias in Pre-trained Language Models through Counterfactual Contrastive Prompt Tuning". In: *Findings of EMNLP*. URL: https://aclanthology.org/2023.findings-emnlp.390.pdf.
- Alfifi, M., Dong, X., Feldman, T., Lin, A., Madanagopal, K., Pethe, A., **Teleki, M.**, Wang, Z., Zhu, Z., Caverlee, J., (2022). "Howdy Y'all: An Alexa TaskBot". In: *Alexa Prize TaskBot Challenge Proceedings*. URL: https://www.amazon.science/alexa-prize/proceedings/howdy-yall-an-alexa-taskbot.

MENTORING

MS Students

Rohan Chaudhury $[\bigstar \clubsuit \blacktriangle]$ – First Employment: Amazon

Sai Janjur [4] – Presented at Student Research Week [1st Place Category Award]

Cong Wang [♣]

Undergraduate Students

Soohwan Kim $[\bigstar \clubsuit \spadesuit]$ – First Employment: UPS

Oliver Grabner [♣] – Presented at Student Research Week

Thomas Docog [♣]

Ketan Verma [♣]

 \bigstar indicates that the student was an author on a published paper during the mentorship; \clubsuit indicates that the student had no publications prior to mentorship; \blacktriangle indicates that the student completed their thesis during the mentorship; \spadesuit indicates that the student received course credit as part of the mentorship (i.e. CSCE 485).

SERVICE

Program Committee (Reviewer) for ACL ARR: Aug '24, Oct '24, Dec '24

Program Committee (Reviewer) for ICWSM: Jan '24, May '24, Sep '24

External Program Committee (External Reviewer) for RecSys: '24

Volunteer Judge for Texas Science & Engineering Fair (TXSEF): Senior Division/Mathematics '25

AWARDS & FUNDING

To date, I have received >\$210,000 in funding.

- (2022-2026) Dr. Dionel Avilés '53 and Dr. James Johnson '67 Fellowship in Computer Science and Engineering \$115,625 plus tuition and fees (\sim \$69,496), and health insurance (\sim \$9,241)
- (2025) Department Travel Grant -\$1,000
- (2024) Department Travel Grant -\$1,000
- (2024) CRA-WP Grad Cohort for Women $\sim $1,000$
- (2017-2021) President's Endowed Scholarship \$12,000
- (2018) Bertha & Samuel Martin Scholarship \$1,000

Invited Talks

- (2025) How does ChatGPT work? & My research! at Texas A&M University Club of Aggie Female Engineers (C.A.F.E.)
- (2025) Guest Lectures on IR Evaluation and Learning to Rank at Texas A&M University CSCE 670 Information Storage & Retrieval
- (2024) The Other AI: An Intuitive Understanding of Artificial Intelligence at Texas Tech University School of Veterinary Medicine, Veterinary Business Management Association Club

CERTIFICATIONS

- (Spring 2025) Professional Development Mastery Certificate in Instruction & Assessment GRAD Aggies, CIRTL@TAMU
- (Spring 2025) Academy for Future Faculty Certificate CIRTL@TAMU

Work

Software Enginering Intern at RetailMeNot

May 2021 - August 2021

Used Amazon SageMaker and spaCy to get BERT embeddings for concatenated coupon titles and descriptions. Analyzed the relationship between each dimension of the BERT embeddings and uCTR using Spearman's correlation coefficient, and used PCA to find dimensions with the strongest correlations for coupon ranking.

Software Engineering Intern at RetailMeNot

May 2020 - August 2020

Developed the "RetailMeNot DealFinder" Alexa Skill to help users activate cash back offers. Presented on Alexa Skill Development at the Data Science Sandbox with both Valassis and RetailMeNot teams.

Peer Teacher at Texas A&M University

Dec 2018 - Dec 2019

Helped students with programming homework and answered conceptual questions by hosting office hours and assisting at lab sessions for CSCE 121 and 181. Developed notes with exercises and examples to work through as a group during CSCE 121 reviews.

Applications Engineering Intern at Silicon Labs

May 2019 - August 2019

Designed and implemented the Snooper library to (1) systemize IC bus traffic snooping (I2C, UART, SPI, etc.) across different snooping devices (Saleae, Beagle, etc.), and (2) translate the traffic to a human-readable form for debugging. Responded to multiple tickets from customers using the library.

Afterschool Instructor at The Y (YMCA)

Sep 2016 - July 2017

Taught multiple weekly classes at local elementary schools for the YMCA Afterschool program, and developed curriculum for the program for Lego Mindstorms Robotics and "Crazy Science."