Changye Li

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EDUCATION

Ph.D.   Institute of Health Informatics, University of Minnesota, 2024 (expected)

M.S.   Department of Computer Science and Engineering, University of Minnesota, 2018

B.S.   Department of Economics, University of Minnesota, 2016

B.A.   School of Statistics, University of Minnesota, 2016

PUBLICATIONS

Journal Articles

2024   **Li, C.**, Solinsky, J., Cohen, T., Pakhomov, S., "A curious case of retrogenesis in language: Automated analysis of language patterns observed in dementia patients and young children." In: *Neuroscience Informatics* 4.1 (2024), p. 100155. ISSN: 2772-5286. DOI: https://doi.org/10.1016/j.neuri.2023.100155

2024   **Li, C.**, Xu, W., Cohen, T., Pakhomov, S., "Useful blunders: Can automated speech recognition errors improve downstream dementia classification?" In: *Journal of Biomedical Informatics* 150 (2024), p. 104598. ISSN: 1532-0464. DOI: https://doi.org/10.1016/j.jbi.2024.104598

2022   Pradhan, P., **Li, C.**, Shen, Z., Remucal, M., "Comparison of adverse events between COVID-19 and Flu vaccines." In: *Public Health Review* 5.1 (2022)

2021   Guo, Y., **Li, C.**, Roan, C., Pakhomov, S., Cohen, T., "Crossing the "Cookie Theft" corpus chasm: applying what BERT learns from outside data to the ADReSS challenge dementia detection task." In: *Frontiers in Computer Science* 3 (2021), p. 642517

Conference Proceedings

2023   **Li, C.**, Xu, W., Cohen, T., Michalowski, M., Pakhomov, S., "TRESTLE: Toolkit for Reproducible Execution of Speech, Text and Language Experiments." In: *American Medical Informatics Association Informatics Summit* (2023)

2022   **Li, C.**, Knopman, D., Xu, W., Cohen, T., Pakhomov, S., "GPT-D: Inducing Dementia-related Linguistic Anomalies by Deliberate Degradation of Artificial Neural Language Models." In: *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*. Dublin, Ireland: Association for Computational Linguistics, May 2022, pp. 1866–1877. DOI: 10.18653/v1/2022.acl-long.131

CONFERENCE ACTIVITY

Presentation

2024   **Li, C.**, Solinsky, J., Michalowski, M., Pakhomov, S., "David (LLaMA) takes on Goliath (GPT-4) in an NLP Task of Extracting Adverse Drug Reactions from DailyMed." In: *American Medical Informatics Association Informatics Summit* (2024)

2023   **Li, C.**, Xu, W., Pakhomov, S., Cohen, T., "Investigating the Impact of Speech Recognition Errors on Subsequent Dementia Classification." In: *American Medical Informatics Association Informatics Summit* (2023)

2023   Xu, W., **Li, C.**, Pakhomov, S., Cohen, T., "Task-agnostic Linguistic Detection of Alzheimer's Disease Dementia with Time-series Augmented Representations for Detection of Incoherent Speech (TARDIS)." in: *American Medical Informatics Association Informatics Summit* (2023)

Peer-Reviewed Poster

2022   **Li, C.**, Cohen, T., Pakhomov, S., "The Far Side of Failure: Investigating the Impact of Speech Recognition Errors on Subsequent Dementia Classification." In: *Machine Learning for Health* (2022)

2018   **Li, C.**, Levonian, Z., Ma, H., Yarosh, S., "Condition Unknown: Predicting Patients' Health Conditions in an Online Health Community." In: *Companion of the 2018 ACM Conference on Computer Supported Cooperative Work and Social Computing*. 2018, pp. 281–284

TEACHING

2022 Fall   Teaching Assistant: Python Programming Essentials for the Health Sciences

2021 Fall   Teaching Assistant: Foundations of Biomedical Natural Language Processing

2022 Fall   Introduction to GitHub Workshop

2021, 2022   Python Programming Workshop

SERVICE

Academic Journal and Conference Peer Review

2024   Association for Computational Linguistics (ACL)

2024   International Joint Conference on Artificial Intelligence (IJCAI), AI for Social Good Special Track

2024   Computational Linguistics and Clinical Psychology (CLPsych) Workshop of the European Chapter of the Associated for Computational Linguistics (EACL)

2023, 2024   American Medical Informatics Association (AMIA) Informatics Summit

2023   AMIA Annual Summit

2023   Machine Learning for Health (ML4H)

RESEARCH LABS AND ASSISTANTSHIP

2020-2024   Graduate Research Assistant, University of Minnesota

2019-2020   Graduate Research Assistant, University of Minnesota

2017-2018   Graduate Research Assistant, University of Minnesota

PROFESSIONAL EMPLOYMENT

2023   Research Intern, Truveta, Bellevue, WA

2017   Digital Data Analyst Intern, Padilla, Minneapolis, MN