

# Changye Li

Institute of Health Informatics  
University of Minnesota

lix3013@umn.edu  
+1 612-594-1880  
changyeli.github.io

## 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.ac1-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 European Chapter of the Association for Computational Linguistics (EACL)  
Computational Linguistics and Clinical Psychology (CLPsych) Workshop
- 2024 American Medical Informatics Association (AMIA) Informatics Summit
- 2023 AMIA Informatics Summit
- 2023 AMIA Annual Summit
- 2023 Machine Learning for Health (ML4H)

## **Conference Activity**

- 2022 Junior chair, Research Roundtable, Machine Learning for Health
- 2022 Data hackallenge organizer, Association for the Advancement of Artificial Intelligence Conference on Artificial Intelligence (AAAI), International Workshop on Health Intelligence

## **AWARDS**

### **Awards and Honors**

- 2024 Outstanding Student Award, Institute of Health Informatics, University of Minnesota
- 2024 Reviewer Award, AMIA Informatics Summit

## **RESEARCH ASSISTANTSHIP**

- 2020-2024 College of Pharmacy, University of Minnesota
- 2019-2020 Carlson School of Management, University of Minnesota
- 2017-2018 Department of Computer Science and Engineering, University of Minnesota

## **PROFESSIONAL EMPLOYMENT**

- 2023 Research Intern, Truveta, Bellevue, WA
- 2017 Digital Data Analyst Intern, Padilla, Minneapolis, MN