Zeyu Lyu

Project Researcher
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EDUCATION

Ph.D.	Computational Humanities and Social Sciences, Tohoku University, 2019-2022
M.S.	Behavioral Science, Tohoku University, 2017-2019
B.S.	Journalism, Northeastern University (China), 2012-2016

WORK EXPERIENCE

2022/4-Present   **Project Researcher**
Institute of Social Science, The University of Tokyo

GRANTS AND AWARDS

Awards and Honors

2022	Tohoku University President's Award (東北大学総長賞)
2018	Monbukagakusho Honors Scholarship for Privately Financed International Students (文部科学省外国人留学生学習奨励費)

Grants

2020-22	Investigating the mechanism political polarization on social media, Grant-in-Aid for JSPS Fellows
2019–20	Sentiment analysis on social media: Combining natural language processing and network analysis to examine how social media shape opinion dynamics, The Division for Interdisciplinary Advanced Research and Education Research Grant

Fellowships

2020-22	JSPS Research Fellowship for Young Scientists DC2
2019–22	AIE - WISE Program for AI Electronics, Tohoku University
2019–22	The Division for Interdisciplinary Advanced Research and Education (DIARE), Tohoku University

PUBLICATIONS

Peer-Review Articles

2022   **Zeyu Lyu**, Hiroki Takikawa. "Disparity and Dynamics of Social Distancing Behaviors in Japan: An Investigation of Mobile Phone Mobility Data.", *JMIR Medical Informatics* 10(3):e31557, doi:10.2196/31557

2020	Maoxin Ye, **Zeyu Lyu**."Trust, Risk Perception, and COVID-19 Infections: Evidence from Multilevel Analyses of Combined Original Dataset in China", *Social Science and Medicine* 265,113517, doi:10.1016/j.socscimed.2020.113517 (corresponding author)
2020	**Zeyu Lyu**. "Ideological and Behavioral Perspectives on Political Polarization: Evidence from Japan.", *Sociological Theory and Methods* 35(2). doi:10.11218/ojjams.35.170
2019	**Zeyu Lyu**. "Towards an Understanding of Online Extremism in Japan", *IEEE/WIC/ACM International Conference on Web Intelligence on - WI '19 Companion*. doi:10.1145/3358695.3360922

Manuscripts in Review

2022	**Zeyu Lyu**, Hiroki Takikawa. "Media framing and expression of anti-China sentiment in COVID-19-related news discourse: An analysis using deep learning methods.", Under review.
2022	**Zeyu Lyu**. "Cross-Cutting Interaction, Inter-Party Hostility, and Partisan Identity: Analysis of Affective Polarization in Social Media.", Under review.

CONFERENCE/WORKSHOP

Oral Presentation

2022	**Zeyu Lyu**."Cross-Cutting Interaction, Out-Group Hostility, and Partisan Identity: Investigation of Affective Polarization on Social Media" *International Conference on Computational Social Science(IC2S2 2022)*, Chicago, IL. July 19th-22ed.
2022	**Zeyu Lyu**."Cross-Cutting Interaction, Out-Group Hostility, and Partisan Identity: Investigation of Affective Polarization on Social Media" *CSSJ2022*, Online. March 1st.
2021	**Zeyu Lyu**, Hiroki Takikawa."Anti-China sentiments during the COVID-19 pandemic: An analysis using deep learning methods " *International Conference on Computational Social Science (IC2S2 2021)* , Online. July 27th-31st.
2021	Hiroki Takikawa, **Lyu Zeyu**, Yuske Inagaki, Yutaka Nakai, Jun Tsunematsu, Takuto Sakamoto, Shinya Obayashi."Effects of family and social interaction on mental well-being in populations under social distancing restrictions during the COVID-19 pandemic", *International Network of Analytical Sociologists 13th Annual Conference*, Online. May 29th-30th.
2021	**Zeyu Lyu**, Hiroki Takikawa."Sensing community and individual psychological states during COVID-19 in China: Estimation method based on social media data and deep learning", *International Network of Analytical Sociologists 13th Annual Conference*, Online. May 29th-30th.
2021	**Zeyu Lyu**, Hiroki Takikawa."The relationship between gender, age, and occupation and adherence with restriction measures during the COVID-19 pandemic: An investigation of mobile phone mobility data", *Computational Social Science Japan 2021*, Online. Feb 27th-28th.
2020	**Zeyu Lyu**. "Inequality in the Academic Attention of Social Science Research", *International Computational Humanities and Social Science Workshop*, Sendai. Jan 19th.

2019	Yoshimichi Sato, **Zeyu Lyu**. "Japanese Language Schools as Alternative Routes to the Labor Market in Japan", *The Annual Meeting of the American Sociological Association*, New York. Aug 10th-13th.
2019	**Zeyu Lyu**. "An Computation Approach for Investigating Political Polarization Evidence from Ideological Stance and Interaction Behaviors in Japanese Twitter", *The 5th East Asian Conference for Young Sociologists*, Taipei. Feb 19th-20th.
2018	**Zeyu Lyu**. "Political Polarization on Japanese Twitter: Estimating Ideology with Bayesian Ideal Points Estimation", *Graduate Conference in Japanese Studies 2018* , Osaka. Dec 3rd.

OTHER EXPERIENCE

2022/1-2022/3	**Research Assistant** Graduate School/Faculty of Arts and Letters, Tohoku University
2021/10-2022/3	**Research Assistant**, Frontier Research Institute for Interdisciplinary Sciences, Tohoku University
2021/3	**Teaching Assistant** Data Science and Sociology (Short Workshop) in Tokyo University
2020/4–2021/3	**Research Assistant** School of Engineering, Tohoku University
2019/10–2022/3	**PC Supporter** Graduate School/Faculty of Arts and Letters, Tohoku University
2018/10–2019/3	**Academic Assistant** Graduate School/Faculty of Arts and Letters, Tohoku University
2017/4–2018/3	**International Student Tutor** Graduate School/Faculty of Arts and Letters, Tohoku University

RESEARCH PROJECT EXPERIENCE

Academic Research Project

2021-	**Research Assistant** **Project:** パンデミックに備える社会的データ収集枠組みの構築と数理モデルによるネットワーク介入の有効性評価 (JST さきがけ /PI: Hiroki Takikawa) **Research Content:** Combine mobility data and social survey to investigate the widening inequalities due to the COVID-19 pandemic.
2021-23	**Research Collaborator** **Project:** 計算社会科学の社会学的基盤の構築 (挑戦的研究:21K18448/PI: Yoshimichi Sato) **Research Content:** Attempt to establish the sociology theoretical foundation for computational social science.
2021-22	**Research Assistant** **Project:** 天文と古典学 (東北大学共創基金+名古屋大学YLC助成/PI:Kohei Ichikawa)

Research Content: Build historical documents data archive and employ text mining techniques to provide insight of astronomical events in history.

2021-	**Research Collaborator** **Project:** 社会的接触調査に基づく社会的ネットワーク上のダイナミクス解析 (東北大学ポストコロナ社会構築研究スタートアップ支援 /PI: Hiroki Takikawa) **Research Content:** Investigate the structure of real social networks based on social contact surveys and employ mathematical methods to reconstruct the dynamics of network.
2020-22	**Research Collaborator** **Project:** ビッグデータ分析と実験の統合によるオンライン社会における場のダイナミクスの解析 (基盤研究B:20H01563 /PI: Hiroki Takikawa) **Research Content:** Combine big data analysis and digital experiment methods to investigate human behaviors and opinion dynamics in online discourse.
2020-22	**Principal Investigator** **Project:** Investigating the mechanism political polarization on social media (Grant-in-Aid for JSPS Fellows:20J11407) **Research Content:** Employ social media data and computational methods to investigate how exposed information can affect the formation of opinions and provide a more comprehensive understanding on political polarization.
2019-20	**Principal Investigator** **Project:** Sentiment analysis on social media: Combining natural language processing and network analysis to examine how social media shape opinion dynamics (The Division for Interdisciplinary Advanced Research and Education Research Grant) **Research Content:** Investigate the opinion dynamics on social media through the combination of natural language processing and network analysis methods.

Industry-Academia Collaboration Project

2021-2022	**Softbank** **Research Content:** Develop aspect based sentiment analysis system that can extract aspects and classify corresponding sentiment polarities in users' comments.
2020-22	**NHK** **Research Content:** Employ natural language processing techniques to capture the dynamics of opinion towards politicians on social media.

SKILL

Programming: Python, R, Spark, SQL, HTML

Writing: LaTeX, Markdown

Updated April 2022