MINGQIAN ZHENG

■mingqia2@andrew.cmu.edu ♀github �eeelisa.github.io ▶734-834-8955

EDUCATION

Carnegie Mellon University

Sep.2024 - Present

Ph.D. in Language and Information Technology

Coursework: Advanced Natural Language Processing, Multimodal Machine Learning, Ethics, Safety, and Social Impact

in NLP and LLMs

Advisors: Carolyn Rosé, Maarten Sap

University of Michigan Sep. 2022 - May. 2024

Master in Survey and Data Science (Data Science Track),

Coursework: Natural Language Processing, Information Retrieval, Statistical Methods and Machine Learning, Machine

Learning for Social Science

Advisor: David Jurgens, Yajuan Si

New York University Shanghai

Sep. 2018 - May 2022

Bachelor of Science in Mathematics

GPA: 3.7/4.0

GPA: 4.0/4.0

Thesis: Modeling Short-term and Long-term Dynamics of User Intention for Missing-Not-At-Random Implicit Feedback

in Recommendation Systems

Advisor: Shuyang Ling

Bachelor of Science in Data Science (Computer Science Track)

Thesis: User Intention Detection and Evaluation for Recommendation Systems

Advisors: Hongyi Wen, Oliver Marin

Coursework: Machine Learning, Algorithms, Data Structures, Partial Differential Equations, Information Visualization,

Databases, Numerical Analysis, Math Modeling, Probability and Statistics

PUBLICATION

When "A Helpful Assistant" Is Not Really Helpful: Personas in System Prompts Do Not Improve Performances of Large Language Models, Findings of EMNLP 2024

Mingqian Zheng, Jiaxin Pei, Lajanugen Logeswaran, Moontae Lee, David Jurgens

Causally Modeling the Linguistic and Social Factors that Predict Email Response, NAACL 2025

Yinuo Xu*, Hong Chen*, Sushrita Rakshit*, Aparna Ananthasubramaniam*, Omkar Yadav*, **Mingqian Zheng***, Michael Jiang*, Lechen Zhang*, Bowen Yi*, Kenan Alkiek*, Abraham Israeli*, Bangzhao Shu*, Hua Shen*, Jiaxin Pei*, Haotian Zhang*, Miriam Schirmer*, David Jurgens (* denotes equal contributions)

AWARDS

Rackham Graduate Student Research Grant at University of MichiganAug.2023University Honors Scholar at New York UniversityMay.2022NYU Shanghai 2020 Recognition Award (Top 0.5%) academic merit and community contributionsAug.2020

RESEARCH EXPERIENCE

The Blablablab

May.2023 - Apr.2024

Advisor: Prof. David Jurgens at University of Michigan

- Built a pipeline for systematic evaluation of social roles in Large Language Models' system prompts
- Created a list of 162 roles covering 6 types of interpersonal relationships and 8 types of occupations, and showed that adding interpersonal roles in prompts consistently improves the models' performance over a range of questions through extensive analysis of 3 popular LLMs and 2457 questions
- Conceived and implemented multiple role-prediction methodologies, optimizing for the most effective role assignment in response to specific queries by evaluating frequency, similarity, and perplexity parameters

Global Health and Population Project on Access to Care for Cardiometabolic Diseases

Advisor: Prof. David Flood at University of Michigan

- Independently conducted data harmonization following the World Health Organization (WHO) STEPwise approach to noncommunicable disease risk factor surveillance (STEPS) using Stata
- Assisted in an ongoing research project on predicting diabetes prevalence and progress toward four WHO Diabetes Targets at the country level using a Bayesian statistical modeling approach
- Participated in monthly research meetings with other HPACC research teams

Investigating User Profiles on Reddit: A Multi-Label Classification Study

Mar.2023 - May.2023

Advisor: David Jurgens at University of Michigan - Ann Arbor

- Developed a multi-label classifier using RedDust dataset on Reddit, predicting user attributes (profession, gender, hobbies) through sentence transformer-based text embeddings
- Executed K-means algorithm for community detection on Reddit, analyzing qualitative aspects for insightful community dynamics

Child and Adolescent Data Lab

Oct.2022 - May.2023

Advisor: Prof. Joseph Ryan at University of Michigan

- Conducted thorough data processing and analysis of surveys distributed by the State Court Administrative Offices on the topics of child welfare and juvenile justice systems

User Intention Detection and Evaluation for Recommendation Systems

Feb.2022 - May.2022

Advisors: Prof. Hongyi Wen and Prof. Oliver Marin at NYU Shanghai

- Proposed an intention-aware recall metric along with a statistical mechanics of user intention extraction based on the MovieLens 1M dataset
- Verified the reliability of the metric in evaluating recommendation models by comparing the scores and performances of four DNN and RNN models

INTERNSHIP EXPERIENCE

Natural Language Processing Research Intern(Core R&D Group) at iFlytek

Jul.2021 - Oct.2021

- Applied Recurrent Neural Networks (RNN), sequence labelling and supervised classification methods to implement word-level language identification in a code-switching dataset containing English and Spanish
- Trained the model to achieve accuracy 86% based on the cleaned dataset of 3332 English-Spanish multilingual tweets and the model was used as the baseline model for the future product

Overseas Marketing Intern at HappieWatch

Jun.2021 - Jul.2021

- Conducted in-depth analysis of Instagram and YouTube influencer marketing data, leading to the successful negotiation and signing of contracts with three key opinion leaders (KOLs) for digital marketing campaigns.
- Efficiently supported digital marketing strategies through social media, analyzing Shopify and Google Ads data to deliver insightful weekly reports to stakeholders

EXTRACURRICULAR/LEADERSHIP EXPERIENCE

NYU Shanghai Youth League

Sep.2019 - May.2022

Vice Secretary (Class of 2022)

- Organized and executed more than 10 school-level activities promoting cross-cultural exchange, building a platform for service and community engagement for the entire student body

NYU Shanghai student publication On Century Avenue

Sep.2019 - May.2020

Association Initiator and Director of News and Chinese Committee

- Collaborated with a diverse team to establish an independent student publication, ensuring representation of the entire student body
- Served as a key leader in the initial core group of 6, instrumental in expanding the team to over 80 members, significantly enhancing on-campus presence, evidenced by a 500-follower increase on Instagram
- Led the committee in conducting interviews and reporting on-campus issues, effectively bridging communication between university administration and students

Nov.2022 - Apr.2024

Shanghai Students' Federation

Aug.2018 - May.2020

Group Leader of New Media Department

- Coordinated 20 members to write more than 50 articles on trending issues pertinent to Shanghai college students, encompassing news and survey reports

COMMUNITY SERVICES

Paper Review ACL Rolling Review

Book Review Synthesis Lectures on Human Language Technologies

SKILLS

Programming Languages Python, R, Stata, Matlab, SQL, HTML/CSS

Programming Libraries Hugging Face, transformers, Pandas, scikit-learn, NumPy, Matplotlib

Deep Learning Frameworks PyTorch, TensorFlow, Keras

Statistical and Data Analysis Skills Regression Analysis, Multilevel Modeling, Causal Inference