Nan Peng

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EDUCATION

Jinan University   Guangzhou, China

Master in Computational Communication   Sep 2023 – Jun 2026 (Expected)

· Average Score: 91.7/100

Nanjing Forestry University   Nanjing, China

Bachelor in Broadcasting and Television   Sep 2019 – Jun 2023

· Average Score: 89.41/100; Rank: 1/70

PUBLICATIONS

[1] **Peng, N.**, Zhao, T. F., & Zhi, T. R. *Trust Hierarchy in Deepfake Deception: A Grounded Theory Analysis of Global Cases. information, communication & society*. Under Review.

[2] **Peng, N.**, & Zhi, T. R. *The Double-Edged Sword of Media Literacy: Reflections on Fraud Susceptibility and Trust Mechanisms Among Older Adults in Deepfake Deception. Convergence*. Under Review.

[3] **Peng, N.**, & Zhao, T. F. *Unveiling Risk Evolution Mechanisms Driven by Deepfake Technologies. Proceedings of the 12th International Conference on Machine Intelligence Theory and Applications (MiTA 2025)*, IEEE, May 2025. https://doi.org/10.1109/MiTA66017.2025.11100255.

RESEARCH EXPERIENCE

Elderly Fraud Prevention Simulation with Large Language Models (LLMs)

Project Leader   Dec 2024 – Present

· Designed a simulation system integrating LLMs to evaluate elderly susceptibility to deepfake scams.

· Constructed four personas from 48 interviews; extracted dominant scam strategies using SHAP-based feature interactions from media reports.

· Incorporated GPT API to dynamically generate scammer dialogues and victim responses.

· Modeled trust patterns and scam susceptibility across personas under different strategies and interventions.

· Identified differentiated impacts of intervention measures on various elderly groups.

Multidimensional Feature Analysis and Temporal Forecasting of Deepfake-related Weibo Discussions

Project Leader   Mar 2025 – Jun 2025

· Collected 88,273 Weibo posts (2017–2025) on the topic of "deepfake."

· Applied time-series analysis, SnowNLP sentiment computation, BERTopic modeling, and Prophet forecasting.

· Identified four evolutionary stages of public discussion and shifts in sentiment from curiosity → panic → rationality → caution; extracted three dominant themes: technology applications, privacy ethics, and scam risks.

· Proposed a replicable "time–sentiment–topic–forecast" framework to support platform alert systems and governance policy.

Multi-platform Public Opinion Data Collection and Visualization Tool

Co-developer   Oct 2024 – Feb 2025

· Built a one-stop platform to collect posts and comments from major Chinese and international media platforms.

· Developed modules for thematic river visualization, word frequency and word cloud analysis.

Multidimensional Feature Analysis and User Behavior in Public Health Opinion Formation

Principal Investigator   Dec 2024 – Mar 2025

· Analyzed 154,547 Weibo posts on "H1N1 flu" using a three-dimensional framework ("content–sentiment–user").

· Conducted semantic network analysis and BERTopic modeling to extract 10 themes with a four-level hierarchy.

· Applied SnowNLP for sentiment quantification and identified amplification effects of KOLs and institutional accounts.

· Provided actionable recommendations for public health crisis communication and opinion monitoring.

Causes, Media Expressions, Social Network Structures, and Intervention Simulations of Substance Abuse among Chinese Women: Evidence from the Weibo Overdose Community

Project Leader   Aug 2025 – Present

· Conducted in-depth interviews with Chinese female overdose users.

· Implemented semantic and social network analysis of Weibo posts.

· Designed and ran agent-based modeling (ABM) simulations to evaluate intervention strategies.

International Communication Capacity Building in Guangdong Province

Research Assistant   Apr 2025 – Present

· Contributed to cross-platform opinion data scraping, cleaning, analysis, and visualization.

· Covered regions including Guangdong, Beijing–Tianjin–Hebei, and the San Francisco Bay Area.

· Supported evaluation of communication effectiveness and provided strategic recommendations for provincial authorities.

Constructive Communication: Governance and Transformation of Online Communities

Research Assistant   Jun 2021 – Jun 2022

· Focused on sports reporting and aging-friendly communication as two case studies; contributed to two independent publications: one on media gaze in sports and another on digital divide among older adults.

China Livelihood Survey 2021

Field Researcher   Sep 2021 – Oct 2021

· Conducted multiple rounds of pilot testing to optimize questionnaire logic and wording.

· Applied a "ask–explain–probe–record–feedback" loop method in structured interviews during fieldwork.

· Led abnormal data screening and follow-up calls, significantly improving data accuracy.

· Authored a research report based on validated data, which was awarded Third Prize by the Development Research Center of the State Council.

WORK EXPERIENCE

Youth Engagement Committee, Special Olympics East Asia

Member   Aug 2023 – Present

· Assisted in organizing the *2023* Special Olympics East Asia Athlete Leadership Training.

· Supported YEC in promoting Special Olympics and disability inclusion in China.

· Designed, filmed, and edited promotional videos for inclusion campaigns.

AGI Media Intelligence Application R&D Center, Jinan University

Research Assistant   Jun 2024 – Jun 2025

· Conducting research on AI-driven media applications, with a focus on computational communication and generative AI; Supporting data collection, analysis, and experimental design for interdisciplinary projects.

· Assisted in organizing academic seminars and frontier lectures to promote scholarly exchange.

AWARDS & HONORS

· **National Scholarship (Top 1% honor**, Ministry of Education of China**)**   2021 – 2022

· Third Prize, Paper: *Research on Identity Avoidance and Social Integration of Siblings of Individuals with Intellectual Disabilities from a Technology-empowerment Perspective*, 8th Guangdong Postgraduate Forum on Journalism and Communication   2023

· Third Prize & Outstanding Field Researcher, *China Livelihood Survey 2021*, Development Research Center of the State Council   2021

· Third Prize (National) & First Prize (Provincial), *9th National Undergraduate Computer Design Competition – Digital Media Animation and Short Film*   2021

· Provincial Awards (1st ×2, 2nd ×2, 3rd ×4), National College Student Advertising Art Competition & National College Digital Art Competition – Science Popularization Video   2020–2022

· Awarded Volunteer Service Certificate, People's Government of Jiangsu Province   2021

SKILLS

Data Analysis & Visualization

Experienced in semantic network analysis, social network analysis, and topic modeling.

Proficient in Python (NumPy, Scikit-learn, NetworkX, BERTopic, etc.) and OriginLab.

Skilled in front-end development and creating interactive charts with D3.js, Plotly, and Matplotlib.

Media Production

Proficient in Adobe Premiere Pro, Photoshop, After Effects, Audition, as well as Autodesk Maya.

Capable of independently conducting video planning, scriptwriting, shooting, and editing.

Additional Interests

Piano (Level 10 Certificate); Reading & Writing (Member, Taicang Writers' Association, Jiangsu Province).