Junichiro Niimi

Associate Professor, Faculty of Business Management, Meijo University

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Research Interests

Deep learning and large language models (LLMs) for marketing applications; energy-based world models and language generation; LLM ensemble methods and inference stability; multimodal learning for consumer behavior prediction; statistical modeling for business analytics.

Education

Ph.D. in Economics 2015 – 2018
Nagoya University, Graduate School of Economics

M.A. in Economics 2013 – 2015
Nagoya University, Graduate School of Economics

B.A. in Economics 2009 – 2013
Nagoya University, School of Economics

PhD Professional Program 2013 – 2018
Nagoya University Leading Graduate School Program

International Programs
Malaysia (English), Mongolia, Cambodia, Kyrgyzstan, USA (Illinois, North Carolina)

Professional Experience

Associate Professor 2022 – Present
Faculty of Business Management, Meijo University

Visiting Researcher 2020 – Present
RIKEN Center for Advanced Intelligence Project (AIP)

Joint Researcher Current
International Policy & Economics Research Center, Nagoya University Graduate School of Economics

Assistant Professor 2019 – 2022
Faculty of Business Management, Meijo University

Special Postdoctoral Researcher 2018 – 2019
RIKEN Center for Advanced Intelligence Project (AIP)

Trainee & Visiting Researcher 2017 – 2018
Economic & Management Information Fusion Analysis Team, RIKEN

Technical Advisor Current
TSE Prime-listed manufacturer (undisclosed)

Advisor Current
TSE Prime-listed market research firm (undisclosed)

Intern
Microsoft Japan; IBM T.J. Watson Research Center & IBM New York

Peer-Reviewed Publications

[1] **J. Niimi** (2026). "The Mouth is Not the Brain: Bridging Energy-Based World Models and Language Generation." *ICLR 2026 Workshop on World Models: Understanding, Modelling, and Scaling.* doi:10.48550/arXiv.2601.17094

[2] **J. Niimi** (2026). "Hallucinate or Memorize? The Two Sides of Probabilistic Learning in Large Language Models." *Proceedings of the 18th International Conference on Agents and Artificial Intelligence (ICAART 2026), pp. 2971–2980.* (CORE Rank B) doi:10.48550/arXiv.2511.08877

[3] **J. Niimi**, T. Tsukamoto, M. Takeuchi, A. Shibata (accepted). "Deep Multi-Task Learning for Energy Consumption Forecasting of Household Water Heater Usage." *Proceedings of the 8th International Conference on Artificial Intelligence in Information and Communication (ICAIIC).*

[4] **J. Niimi** (2025). "Stable LLM Ensemble: Interaction between Example Representativeness and Diversity." *Lecture Notes in Networks and Systems, Springer Nature.* doi:10.48550/arXiv.2510.13143

[5] **J. Niimi** (2025). "Reference Points in LLM Sentiment Analysis: The Role of Structured Context." *Proceedings of the 39th Pacific Asia Conference on Language, Information and Computation (PACLIC 39).* doi:10.48550/arXiv.2508.11454

[6] **J. Niimi** (2025). "A Simple Ensemble Strategy for LLM Inference: Towards More Stable Text Classification." *Lecture Notes in Computer Science, 15837, 189–199, Springer.* doi:10.1007/978-3-031-97144-0_17

[7] M. Takeuchi, **J. Niimi**, T. Hoshino (2023). "Handling the Inconsistency between Self-Report and the Actual Behavior: Validity of Excluding Survey Participants with Insufficient Effort Responding." *International Journal of Market Research, 66(4), 451–472.* doi:10.1177/14707853231209933

[8] R. Fujii, K. Suzuki, **J. Niimi** (2021). "Public Perceptions, Individual Characteristics, and Preventive Behaviors for COVID-19 in Six Countries: A Cross-Sectional Study." *Environmental Health and Preventive Medicine, 26, 29.* doi:10.1186/s12199-021-00952-2

[9] **J. Niimi**, T. Hoshino (2017). "Prediction of Purchase Behavior Using Diversity Variables of Customer Behavior: Deep Learning Applied to Multi-Channel Analysis of Physical Store, Web, and Mobile." *Transactions of the Japanese Society for Artificial Intelligence, 32(2), B-G63_1.* doi:10.1527/tjsai.B-G63

Research Grants

KAKENHI 24K16472 (PI) 2024 – 2027
Development of Comprehensively Explainable Multimodal Deep Learning Models for Marketing

KAKENHI 25K00678 (Co-I) 2025 – 2029
Integrated Study on the Impact of Inattention/Insufficient Effort Responses in Market Research and Marketing Analysis

Reviewing Experience

ICLR | ICONIP 2025 | ACL Rolling Review | Behaviormetrika

Technical Environment

Computing: NVIDIA DGX Spark, Mac Studio; Google Cloud Platform

Languages & Frameworks: Python, PyTorch, TensorFlow, JAX, MATLAB, R, SQL

Research Tools: LaTeX, Git, custom model implementations from scratch (e.g., Deep Boltzmann Machines, energy-based models)

Languages

Japanese (native) | English (professional working proficiency)