

PROFILE

Incoming MSc candidate in Data Science for Sustainability with industry and research experience across geospatial data, mobility modelling, and LLM-enabled agents. Worked with GPS trajectories, POI data, ETL workflows, tool calling, and model evaluation. Interested in AI Agent product/project roles that connect user needs, data, and technical delivery, as well as data and geospatial analyst roles.

EDUCATION

National University of Singapore, Singapore	Aug 2026 - Aug 2027 (Expected)
MSc in Data Science for Sustainability	
Southern University of Science and Technology, Shenzhen, China	2022 - 2026
BSc in Statistics Outstanding Thesis: Machine Learning-Based Community Detection in Scientific Collaboration Networks	

EXPERIENCE

LocationMind Inc., Tokyo, Japan	Jul 2025 - Mar 2026
Development Intern	
- Supported ETL workflows for ingesting, cleaning, and transforming multidimensional geospatial datasets used in analysis and reporting. - Combined urban, socioeconomic, and infrastructure data to create features for commercial POI location profiles. - Compared mobility prediction and spatial analytics methods and documented findings for product and architecture discussions. - Evaluated large multimodal models on spatial reasoning tasks using satellite imagery and structured geographic context.	
Information Technology Center, The University of Tokyo, Tokyo, Japan	Feb 2025 - Aug 2025
Collaborative Research Assistant	
- Processed GPS trajectory data and used spatial joins to map coordinates to administrative boundaries. - Created spatiotemporal features from hourly movement records and used GIS distance checks to validate mobility sequences. - Contributed to a tool-calling LLM workflow that retrieved trajectory data and generated individual mobility patterns.	

SELECTED PROJECTS

AgentMob: Evidence-Grounded Mobility Prediction with an LLM Agent	Feb 2025 - Aug 2025
- Contributed to a training-free, evidence-grounded next-location agent: routine cases followed a history-based fast path, while ambiguous cases triggered iterative tool use. - Worked on mobility-data integration, structured prompts, and cross-dataset evaluation for tools retrieving recent context, historical behaviour, stay/move likelihood, and candidate-location profiles. - On BW, the controller improved overall Acc@1 from 60.05% to 71.42%, raised non-fast-path Acc@1 from 30.65% to 48.62%, and reduced mean distance error from 3.44 km to 2.20 km. - GPT-5.4 achieved 71.42%, 33.14%, and 33.50% Acc@1 on BW, YJMob100K, and Shanghai ISP; 62.54% of BW cases used the fast path with 1.16 tool calls per sample.	
MACA-PA: Modular Agent-Based Clinical Assistant for Perioperative Anesthesia	Nov 2025 - Jan 2026
- Contributed to a locally deployable multi-agent and RAG clinical assistant in which a root agent routes tasks to specialised agents for clinical summaries, CRF generation, and medical-history classification. - Designed publication-ready workflow diagrams covering task routing, local-RAG prompt construction, and coordination among specialised agents. - Proofread and rewrote manuscript sections to improve technical clarity, clinical terminology, and consistency between the system description and figures; published at ACM HIDA 2026.	
Scientific Collaboration Network Analysis, SUSTech	Sep 2024 - Jan 2025
- Represented academic concepts using Word2Vec embeddings and constructed author networks with NetworkX. - Analysed relationships between author attributes, network structure, and academic influence.	
LLM-Based Entity Extraction and Collaboration Networks, The University of Hong Kong	Jul 2024 - Sep 2024
Extracted organisations and relationships from COVID-19 news using LLMs and prepared structured outputs for network analysis.	

SKILLS

Data & Geospatial: Python (pandas, NumPy, NetworkX), SQL, QGIS, ETL, spatial joins, GPS/POI analysis
AI Agent: LLM workflows, tool calling, prompt design, model evaluation, comparative benchmarking
Product & Research: technical evaluation, research synthesis, analytical reporting
Languages: Chinese (native), Japanese (JLPT N1), English (IELTS 6.5)

SELECTED PUBLICATIONS

Chen, L., Zhao, Q., Li, Z., Li, M., Ni, L., et al. "Towards Efficient and Evidence-Grounded Mobility Prediction with LLM-Driven Agent." *arXiv*, 2026. doi:10.48550/arXiv.2606.05130.

Jiang, Y., Ma, C., Xu, Z., Mu, D., Ni, L., et al. "MACA-PA: A Modular Agent-Based Clinical Assistant for Perioperative Anesthesia." *HIDA 2026*, ACM, 2026. doi:10.1145/3819113.3819136.

Jiang, Y., Ma C., Ni, L., et al. "CAKE: Clinical Trial-Oriented Agent for Knowledge Extraction from Health Records." *SJTU Interdisciplinary Graduate Academic Symposium*, 2025.