JIANG Maiqi

Email: mjiang04@wm.edu
Github: https://github.com/MaiqiVerse | Python, PyTorch
Mobile: +1-757-875-4331

Research Interests: Efficient Foundation Models, Model Compression, On-device Inference, Edge/Federated Learning, Multimodal Perception for Connected Vehicles.

EDUCATION

- **College of William & Mary** — Williamsburg, VA
  PhD in Computer Science — 8.2025 - Present
- **The Hong Kong Polytechnic University (QS Top 60)** — Hong Kong
  *M.Sc. in Information Technology with **Distinction Award*** — 8.2021 - 1.2023
- **Northeastern University, China (985 Project)** — Shenyang, China
  B.S. in Biomedical Engineering — 9.2017 - 6.2021

PUBLICATIONS

- **Maiqi Jiang**, Yanshuo Chen, Guodong Liu, Avinash Sahu, Ye Gao, Yanfu Zhang: PAIRS, Not Labels: Predicting Protein-Phenotype Associations via Link Prediction. IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2026).
- Mahmud Wasif Nafee[*], **Maiqi Jiang**[*], Haipeng Chen, Yanfu Zhang: Dynamic Retriever for In-Context Knowledge Editing via Policy Optimization. Proceedings of the 2025 Conference on Empirical Methods in Natural Language Processing (EMNLP 2025), pp. 16755–16768. ([*]Co-first Author)
- Omid Mersa, **Maiqi Jiang**, Ye Gao, Qun Li, Yanfu Zhang: Hierarchical Convolution Multibranch Transformer for EEG Signals. IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2026).
- **Maiqi Jiang**, Xugui Zhou, Bin Ren, Junyi Li, Shangqian Gao, Yanfu Zhang: SFT-P: Federated Tuning and Pruning for LLMs. Submitted to ACL 2026 (under review).
- **Maiqi Jiang**, Noman Ali, Yiran Ding, Yanfu Zhang: Is Meta-Path Attention an Explanation? Evidence of Alignment and Decoupling in Heterogeneous GNNs. Submitted to KDD 2026 (under review).
- Zhaoqing Li[*], **Maiqi Jiang**[*], Shengyuan Chen, Bo Li, Guorong Chen, Xiao Huang: Automated Heterogeneous Network Learning with Non-Recursive Message Passing. arXiv preprint, 2025. ([*]Co-first Author)

EXPERIENCE

- **Federated Tuning & Structural Pruning for LLMs (SFT-P)** — William & Mary
  Researcher (Advisor: Prof. Yanfu Zhang) — Aug 2025 – Jan 2026
  - Proposed SFT-P: **FedAvg**-based training that jointly learns client-specific structured pruning masks and adaptation for **on-device** deployment under non-IID private data; supports mixed client budgets.
  - Implemented a **client-conditioned mask generator** (shared hypernetwork + private client embedding) producing hard binary routing masks via Bernoulli gating, and a residual-safe route/merge interface for dense-kernel execution; achieved +8.5 Avg over the best federated baseline on LLaMA-7B at 50% pruning.

- **Temporal Graph V2X Motion Forecasting on V2X-Seq** — William & Mary
  Project Lead (co-supervised with Advisor: Prof. Yanfu Zhang) — Dec 2025 – Present
  - Led project direction and mentored an intern to build a **per-timestep** dynamic interaction graph for cooperative V2X forecasting and apply Temporal Graph Networks (TGN) for event-driven temporal modeling.
  - On V2X-Seq-TFD (9,320 target agents), improved over our best baseline V2X-Graph: ADE (avg. displacement error) $1.110 \rightarrow 0.981$ (11.6% ↓).
  - Stratified analysis shows the largest ADE gains on **turning maneuvers** (e.g., *left*: ADE $2.115 \rightarrow 1.475$; **30.3%↓**), indicating improved modeling of complex interactive behaviors.
  - Manuscript in preparation for IROS 2026.

- **Explain-and-Share V2X Forecasting under Bandwidth Budgets (Trust & Transfer)** — William & Mary
  Research Prototype (Advisor: Prof. Yanfu Zhang) — Jan 2026 – Present
  - Designing an explain-and-share framework that learns training-time rationales over agents/interactions and converts them into a **bandwidth-aware communication policy** for cooperative forecasting.
  - Prototype plan: RSU-side rationale generation selects top-M motion-critical agents under byte budgets, transmitting compact summaries to the vehicle; evaluation will report accuracy–bandwidth trade-offs and faithfulness (sufficiency/necessity) without post-hoc surrogates.

- **Automated Heterogeneous Network Learning (AutoGNR)** — The Hong Kong Polytechnic University
  Researcher (Advisor: Prof. Xiao Huang) — Nov 2021 – Feb 2023
  - Co-developed **AutoGNR**, using **differentiable NAS** to automatically select heterogeneous aggregation paths—conceptually aligned with **structured pruning** and bi-level optimization.

- **Temporal User Engagement Modeling in Polarized Social Platforms** — City University of Hong Kong
  Research Assistant (Advisor: Prof. Junming Liu) — Feb 2023 – Dec 2023
  - Fused **image/video content features** with text and interaction context via a **temporal GNN** for forecasting user engagement across polarized communities on Twitter/Reddit.

- **Semi-supervised Learning for Whole-Slide Pathology Images (WSI)** — Northeastern University (China)
  Undergraduate Researcher (Advisor: Prof. Xiaoyu Cui) — Nov 2018 – Jun 2021
  - Developed weakly-/semi-supervised pipelines for gigapixel WSI using eye-tracking signals, focusing on efficient patch sampling and **large-scale image processing**.

INDUSTRY & SERVICE

- **Software Developer Intern**: Neusoft Inc., China (Sep 2020)
- **Reviewer**: ICASSP 2026
- **Open Source Contributor**: The Unified AI Framework (Jul 2023)