

Yuxin Wang

Telephone: +1 410 499 3568 | Email: ruangyx@gmail.com | LinkedIn: Yuxin Wang | Github: leastima

EDUCATION

Johns Hopkins University
Department of Applied Mathematics and Statistics
Major : M.S.E. in Data Science
GPA : 3.58/4

01/2026 – Present

Tongji University, Shanghai, CN
College of Electronics and Information Engineering
Major : Data Science and Big Data Technology
GPA : 3.55/4

09/2019 – 06/2023

Key Courses : C/C++/Python Programming, Data Structure and Algorithm Design, Machine Learning, etc.

RESEARCH EXPERIENCE

Self-Evolving Medical Agent via Counterfactual Reasoning
Advised by Dr. Xing Han, Johns Hopkins University

03/2026 – Present

- Designed and implemented an end-to-end self-evolving pipeline for ICU clinical prediction.
- Characterize result of IHM into four typed and curated a 300-example Counterfactual dataset from MIMIC-IV. Fine-tune Qwen2.5-7B with this dataset to improve the quality of Counterfactual.
- On IHM prediction, confidence-gated memory injection improved AUROC from 0.736 $\rightarrow$ 0.804, accuracy 0.727 $\rightarrow$ 0.840, and F1 0.349 $\rightarrow$ 0.478.
- Extending the framework to multitask ICU prediction (mortality, length-of-stay and phenotyping on MIMIC-IV)

Loss Landscape Analysis of Scientific Machine Learning Models
Advised by Prof. Yaoqing Yang, Dr. Pu Ren, Dartmouth College

03/2025 – 05/2026

- Develop measurement of mode connectivity in PINN, characterize models into three regimes based on Hessian, CKA, and MC.
- Develop Hard constraint methods, curriculum learning on PINN, PINO and NeuralODE to observe three regimes in different models and optimization methods.
- Identify and explain several pathological phenomena in SciML that differ from those observed in CV from a loss landscape perspective.
- Accepted by ICML 2026.

PROFESSIONAL EXPERIENCE

Johns Hopkins University, Baltimore, USA
Subject Matter Expert - AI

06/2026 – Present

Advised by Prof. Benjamin Van Durme, Dr. William Walden, Johns Hopkins University

- Evolved a multi-agent deep-research framework for scientific claim verification.
- Improved memory system with compressed context rendering to mitigate token/context blow-up during long-horizon web research.
- Implemented a dual-track LLM-as-judge pipeline to evaluate final reports and execution traces via claim-specific obligation maps and G-Eval-style staged rubrics and used joint diagnostics to identify planning, search, and evidence-uptake failure modes.

Beijing Dajia Internet Information Technology, Beijing, CN
Software Development Engineer

07/2023 – 03/2025

- Built performance analysis, monitoring and traffic replay tools for large-scale mobile systems, enabling rapid diagnosis of memory and performance issues, identified and resolved performance and memory inefficiencies.
- Maintain and develop components such as images, animations, and listviews to support large-scale events on Kuaishou.

SKILLS

Programming Language: C/C++, Python, Objective-C, JavaScript, Scala, SQL

DataBase: MySQL, HBase, PostgreSQL

Big Data Skills: Hive, Hadoop, Spark, Kafka, Flink, PowerBI, Tableau

Operating System: Linux