Yuxin Wang

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

EDUCATION

Johns Hopkins University
01/2026 – Present
Department of Applied Mathematics and Statistics
Major : M.S.E. in Data Science

Tongji University, Shanghai, CN
09/2019 – 06/2023
College of Electronics and Information Engineering
Major : Data Science and Big Data Technology
GPA : 3.55/4
Key Courses : C/C++/Python Programming, Operating System, Data Mining, Data Structure and Algorithm Design, Big Data Management Systems, Cloud computing, Machine Learning, Artificial Intelligence, etc.

RESEARCH EXPERIENCEC

Loss Landscape Analysis of Scientific Machine Learning Models 03/2025 – Present
Advised by Prof. Yaoqing Yang, Dartmouth College
- Develop measurement of mode connectivity in PINN, characterize optimization regimes based on Hessian, CKA, and MC.
- Conduct systematic comparisons of soft and hard constraints, including Fourier parameterization, penalty method, Augmented Lagrangian Method and Trust-Region Sequential Quadratic Programming to analyze the performance on different regimes.
- Identify and explain several pathological phenomena in SciML that differ from those observed in CV from a loss landscape perspective.
- Measure overlap of Hessian top subspace of loss items to identify trivial solutions.
- Accepted by ICML 2026.

Low-light Image Enhancement Technology Based on Attention Mechanism 03/2023 – 06/2023
- Reproduced Illumination Adaptive Transformer and Multi-Axis MLP, and conducted experiments on LOL and SICE
- Optimized the deep convolution enhancement module used in the local branch of the original model by incorporating SWIN attention.
- Attempted to incorporate black level correction transformation matrices from ISP into the global branch.
- Project received 50+ forks on Kaggle; Achieved PSNR of 0.65 and SSIM of 20.45

PROFESSIONAL EXPERIENCE

Beijing Dajia Internet Information Technology, Beijing, CN 07/2023 – 03/2025
Software Development Engineer
- Built performance analysis, monitoring and traffic replay tools for large-scale mobile systems, enabling rapid diagnosis of memory and performance issues.
- Maintain and develop components such as images, animations, and listviews to support large-scale events on Kuaishou, including Singles' Day and Chinese New Year, etc.
- Designed ETL pipelines and dashboards to analyze JSVM memory usage, reducing issue attribution time from hours to minutes.
- Identified and resolved performance and memory inefficiencies in layout, image, animation components and property export, reduced peak memory usage by 56% and rendering time by 11% in dynamic stages for e-commerce and local services scenarios.

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