Guangyu Li

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Education

University of Science and Technology of China June 2025
B.S. Statistics *Current GPA: 3.52/4.30*
University of Science and Technology of China June 2026
Research Assistant

Coursework

Last two semesters: 3.78(89.34)
Core Courses: Time Series Analysis(4.3), Regression Analysis(4.0), Multivariate Analysis(4.3), Nonparametric Statistic(4.3), Operations Research(4.0)
Awards: Outstanding Student Scholarship, Sep. 2021-2024

Skills

Languages: C, Python, R, LaTeX, Matlab
Tools: Git/GitHub, VS Code, Rstudio, LLMs

Publication

Li Guangyu et al.,*"Accelerating Discrete Langevin Samplers via Continuous Intermediates"*
Submitted to Transactions on Machine Learning Research (TMLR)

Research Experience / Projects

In-Context Learning | *Python* Jun. - Now. 2025
- Research Assistant, supervised by Prof. Canhong Wen from USTC
- Learning the proof and research on the generalization of (shallow) Transformer architecture
- Participate in the seminar on the theory of ICL in large language model

AI Healthcare | *Python, Horos* May. - Now. 2025
- Intern Project, supervised by Dr. Joyce Wang from Stanford University
- Utilize foundation models to assist diagnosis by medical data (MRI, CCTA, etc)
- Learned the basic paradigm of Computational Pathology

MCMC Sampling | *Python* Jul. 2024- Mar. 2025
- Intern Project, supervised by Prof. Ruqi Zhang from Purdue University
- Design Continuous-exploratory Discrete Langevin Sampler for discrete distributions
- Learned sampling from high-dimension distribution especially discrete data

Long Read Clustering | *Python, C* May. - Nov. 2024
- Intern Project, supervised by Prof. Zhigang Yao from National University of Singapore
- Investigate applications for RNA-Seq data, especially Long-Read sequence data
- Benchmark the cluster methods on Long-read sequence data

Sparse Logistic Regression Optimization | *VS Code, Python,Matlab* May. 2024
- Independent Researcher, Course Project for Optimization Algorithms, A^-
- Learned the primary optimization algorithms
- Implement and compare two optimization algorithms, Proximal Gradient Method and FISTA

Bot Detection | *Git, VS Code* Feb. 2024
- Independent Researcher, advised by Prof. Defu Lian from USTC, Course Project for Machine Learning, A^-
- Developed a Classifier to detect Bots in Twitter based on multiple classification methods
- Learned how to use ML methods to accomplish classification tasks

Experience

Student Union of USTC | *Member* Sep. 2021 – Sep. 2022
Responsible for the writing of relevant documents and part of the publicity work

Official Media Center of USTC | *Leader* Oct. 2023 – Jun. 2025
Responsible for the daily work in office