JING GAO

📞 (765)-701-5805　✉ gao.jing@wustl.edu　in linkedin.com/in/jing-gao-lzdxn/　⭘ github.com/LZDXN

Education

Washington University in St. Louis	**Aug. 2023 – Expected 2025**
B.S. in Computer Science, double major in Entrepreneurship, minor in Mathematics	*St. Louis, MO*

Technical Skills

Programming Languages: Python, Julia, Java, C, HTML/CSS, JavaScript, Shell
Developer Tools: VS Code, Git, Latex, Markdown, Google Cloud Platform, Amazon Web Service
Technologies/Frameworks: Linux, GitHub, ReactJS, VueJS, WordPress
Speak Languages: Chinese (Native), English (Proficient), Esperanto (Intermediate), Japanese (Beginner)

Certification

Professional Certificate Program: Large Language Models	Databricks (edX)	2024
Large Language Models: Foundation Models from the Ground Up	Databricks (edX)	2024
Large Language Models: Application through Production	Databricks (edX)	2023
Mathematics for Machine Learning: Linear Algebra	ICL (Coursera)	2022

Experience

Washington University in St. Louis	**Oct. 2023 – PRESENT**
Research Assistant	*St. Louis, MO*

- Utilized Julia programming language for developing and implementing data processing pipelines.
- Installed and maintained jupyter server application with encrypted token access.

Research Institute of Tsinghua, Pearl River Delta	**Jun. 2022 – Aug, 2022**
Research Assistant & Project Manager Assistant	*Guangzhou, Guangdong (China)*

- Constructed & evaluate machine models in severe environment.
- Sampled & analyzed data, then Specified & optimized mathematical models.

Publication

Guo, J., & **Gao, J.** (2022). **Comparison of Different Machine Learning Algorithms on Cell Classification with scRNA-seq after Principal Component Analysis**. 2022 7th International Conference on Intelligent Computing and Signal Processing (ICSP). doi.org/10.1109/icsp54964.2022.9778439　[Jingkai Guo and Jing Gao are both first authors]

Research & Projects

WrapperAI | *Large Language Model, Trustworthy and Secure*　**Dec. 2023 - PRESENT**

- Developed a SaaS machine learning solution to optimize and secure the use of large language models (LLMs).
- Implemented dual-layer protection to reduce the risk of inadvertent data exposure.
- Designed a mechanism that ensures ethical interactions and provides a sensitive privacy filter for AI, prompting a safer and more responsible use of advanced AI for businesses.

Stockfish Chess Analysis | *Julia, Python, API, Data Analysis*　**Oct. 2023 - PRESENT**

- Developed and optimized a large-scale data processing algorithm using Julia, handling pgn files of 200GB, significantly enhancing speed and accuracy.
- Revamped the original file scanning algorithm in Julia, achieving a 100x improvement in processing speed and efficiency.
- Designed and conducted experiments with game files in the evaluation engine, utilizing Julia and game theory concepts to analyze and improve strategic game outcomes.

Machine Learning & Computational Biology | *Python, Machine Learning* Jul. 2021 - Mar. 2022

- Collaborated in a hybrid research environment.
- Processed large-scale lab data.
- Built and compared statistical training models.

Honors & Prizes

Hack WashU 2023	Best Use of Google Cloud	2023
HackDartmouth VIII: Into The Multiverse	Contrary Capital - Start Up Prize and 2 more	2023
American Mathematics Competition (AMC) 12	First Place * 2 (A&B)	2021
China Thinks Big (CTB)	National First Prize & Global Round Qualification	2021