

Gaoxuan Li (Gashon)

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EDUCATION

Monash University QS Top100	Feb 2024 - Jul 2025
Master of Data Science	Bandar Sunway, Malaysia
<ul style="list-style-type: none">GPA: 4.0/4.0 (Weighted Average Mark: 84.5/100)Major Courses: Statistical Data Modelling(83 HD), Foundations of Data Science(89 HD), Data Exploration and Visualisation(82 HD) and IT Research Methods(84 HD)	
Hebei University of Science and Technology	Sep 2016 - Jun 2020
Bachelor of Network Engineering in Polytechnic College	Shi Jiazhuang, China
<ul style="list-style-type: none">Weighted Average Mark: 80/100Honors/Awards: Four-Time Recipient of Provincial-Level Awards, Seven-Time Recipient of School-Level Awards, Outstanding Undergraduate Thesis and Two-time Outstanding Team Leader	

RESEARCH EXPERIENCE

Adaptive MIC-Based Noise Injection in Federated Learning for Privacy-Preserving Surgical Activity Analysis	Mar 2024 - Aug 2024
<ul style="list-style-type: none">First Author (Received and Under Review by IEEE ICASSP 2025)Achievements:<ul style="list-style-type: none">Developed the FedMIC framework, enhancing model parameter security in federated learning through adaptive noise injection.Introduced dynamic noise adjustment based on Maximal Information Coefficient, maintaining high accuracy while protecting privacy.Responsibilities:<ul style="list-style-type: none">Researched and optimized the relationship between noise and model parameters.Designed and implemented the FedMIC framework.Conducted comparative tests, showing improved security and accuracy.Ensured data security during federated training using adaptive noise mechanisms.	
FedBChain: A Blockchain-enabled Federated Learning Framework for Improving DeepConvLSTM with Comparative Strategy Insights	Nov 2023 - Apr 2024
<ul style="list-style-type: none">First Author (Accepted by IEEE SMC 2024)Achievements:<ul style="list-style-type: none">Achieved significant improvements in Precision, Recall, and F1-score (4%+ on average) across three real-world datasets.Demonstrated enhancements using five federated learning strategies: FedAvg, FedProx, FedTrimmedAvg, Krum, and FedAvgM.Responsibilities:<ul style="list-style-type: none">Conducted extensive research on reducing LSTM layers for enhanced prediction performance.Designed and implemented the FedBChain framework.Performed comparative tests with different hidden layer units (128, 256, 512) and federated learning strategies.Analyzed and validated results, ensuring improvements in performance metrics.Ensured data security and privacy during distributed training processes.	
Intelligent Navigation System Based on ResNet50-LSTM Combined Model	Jan 2020 - Jun 2020

- Bachelor's Thesis Project (**94/100**)
- [On-site Testing Video](#)
- System Composition: The system consists of four parts: visually impaired user terminal, supervisor terminal, data cloud storage, and image cloud processing.
- Visually Impaired User Terminal: Uses Raspberry Pi 3B+ as the central processor, running a Linux system, equipped with modules for image collection, GPS positioning, ultrasonic distance measurement, voice broadcasting, and remote voice assistance.
- Supervisor Terminal: A WeChat mini-program displaying data including images and corresponding text descriptions, along with distance data of obstacles, also offering remote voice assistance.
- Data Cloud Storage: Uses China Mobile OneNET platform for storing and forwarding system data.
- Image Cloud Processing: Utilizes Flask framework-based web server to generate text descriptions via neural network models, which are then sent back to the user terminal.

WORKING EXPERIENCE

Youxuan Department, Meituan (Fortune Top 500)

Jun 2021 - Sep 2021

Test Development Engineer (Part-time)

Beijing, China

- Managed testing and maintenance of the logistics module for Meituan Youxuan.
- Developed and maintained automated test cases for the logistics module.
- Participated in the research and development of algorithms for automatic generation of system-level test cases.
- Conducted performance evaluations and debugging to ensure optimal system operation.
- Collaborated with various teams to improve automation processes and system efficiency.
- Received an internship performance rating of A (S/A/B/C).

Youxuan Department, Meituan (Fortune Top 500)

Jul 2022 - Dec 2022

Test Development Engineer (Full-time)

Beijing, China

- Responsible for testing and maintaining the vegetable market module.
- Developed and implemented automated testing frameworks to ensure the quality and functionality of the vegetable market module.
- Conducted regular performance evaluations and troubleshooting to identify and resolve issues promptly.
- Collaborated with cross-functional teams to enhance system efficiency and user experience.
- Provided documentation and training to team members on automation tools and processes.

MISCELLANEOUS

- **Skills:** Python, Java(Working Language), SQL, Tableau, RShiny, Linux
- **Languages:** Chinese (Native), English (Fluent)
- **Interests:** Ping Pong & Aerobic Exercise & Climbing