# Lidang Jiang

August 12, 1995, +86 15307241568 2021223075161@alu.scu.edu.cn, 765984881@qq.com Algorithm & Frontend-Backend Full Stack Development Engineer, ¥12k-17k/month From Xianning, Hubei Province, currently living in Haikou, Hainan Province Homepage: https://lidang-jiang.github.io



## EDUCATION

Sichuan University, Master's Degree	2021.09 - 2024.07
College of Chemical Engineering, Materials and Chemical Engineering	
<ul> <li>University Second-class Academic Scholarship, Academic Year 2021 - 2022</li> <li>University Second-class Academic Scholarship, Academic Year 2022 - 2023</li> <li>University Second-class Academic Scholarship, Academic Year 2023 - 2024</li> </ul>	
Jinzhong University, Bachelor's Degree College of Chemistry and Chemical Engineering, Applied Chemistry	2014.09 - 2018.07
Tongshan County No.1 High School	2011.09 - 2014.07

## Self-Evaluation

Scored 502 in College Entrance Exam. Undergraduate GPA: 2.9/4, ranked 45/50. Graduate Entrance Exam: 263 in 2020 and 400 in 2021 (8th/120), Mathematics II: 141 (1st/120). Graduate GPA: 3.5/4, top 30%.

During my graduate studies, I primarily focused on research at the intersection of AI and lithium-ion batteries (LiBs). As the first author, I published two papers in *Energy* and *Applied Energy* (both are Q1 journals in CAS and JCR rankings). Throughout my master's studies, I developed the ability to independently conduct interdisciplinary research.

During my work as a LLM engineer, I quickly learned technologies like RAG and Langchain. To improve coding skills, I turned to traditional development. During this time, I learned front-end and back-end technologies, accumulating full-stack development capabilities.

My current research interests include AI4Science, Agents, Generative AI, Deep Learning, LLMs, and MLsys.

## PUBLICATIONS

1: Jiang, Lidang, et al. "A Robust Adapted Flexible Parallel Neural Network Architecture for Early Prediction of Lithium Battery Lifespan." *Energy*, 308:132840, 2024. (IF=9)

**2**: Jiang, Lidang, et al. "Generating Comprehensive Lithium Battery Charging Data with Generative AI." *Applied Energy*, 377:124604, 2025. (IF=10.1)

#### Professional Skills and Courses

Algorithm Skills	Front-end Skills	Back-end Skills	Other Skills and Courses
Machine Learning, Deep Learning, GenAI, RAG, Agent, Langchain, Pytorch, Distributed Training, Fine-tuning, Few-shot Learning, LLMs Testing and Optimization, Bayesian Optimization	HTML, CSS, JavaScript, Vue, Element-UI, Vant, uni-app, Husky, Prettier, ESLint, Stylelint, Quill, ECharts, Nginx	Java, SQL, MySQL, Spring, SpringBoot, SpringCloud, Mybatis, Redis, Microservices	Git, Docker, Linux, LaTeX, Data Analysis, Mathematical Methods, Numerical Analysis, Stanford CS 231n, CS 224n, CET-4

## Work Experience

China Telecom Digital Intelligence Technology Co., Ltd.	2024.07 - 2025.06
Hainan Branch (Labor Dispatch)	
• Large Language Model Algorithm Engineer (2024.07 - 2024.09)	
• Front-end Development Engineer (2024.09 - 2025.06)	
Wenjia Education, etc., Graduate Entrance Exam Subject Tutor	2021.05 - 2021.12
Guangzhou Lizhi Education Technology Co., Ltd., Yousi Tutoring, etc., Math Teacher	2021.05 - 2021.12
Others (e.g., Unemployed, Preparing for Exams at Home, etc.)	2019.09 - 2021.05
Real Estate Consultant, Environmental Engineer, Hotel Receptionist, Game Booster	2018.07 - 2019.09

## PROJECT EXPERIENCE

## **Project 12: University Researcher Profile System**

2025.05.25—2025.06.04

- Module (Full-Stack): Front-end systems for client and admin + backend API development
- **Project Background**: Personal portal system for university researchers, integrating academic achievements display, project management and news updates, supporting multilingual internationalization. GitHub open-source project, deployed and applied in actual research team websites.
- Technology Stack:
  - Front-end: Vue 2.7 + Element UI + Vue I18n + Vue Router
  - Admin: Vue 2.7 + Element UI + Vuex + Quill editor
  - Build Tools: Vite
  - Backend: Java (Spring Boot) + MyBatis-Plus + MySQL
- Core Contributions:
  - 1. Developed complete front-end code for client and admin systems:
    - Client: Implemented multilingual switching system based on Vue I18n: supporting seamless Chinese-English switching
    - Admin: Developed unified management interface based on Element UI

### 2. Backend API development:

- Designed and implemented RESTful APIs for News and Project modules
- Developed universal data conversion tools: implemented bidirectional mapping between DTOs and entities based on ConvertUtils
- Project Achievements:
  - Successfully deployed on research team's official website: https://www.hegelab.com/
  - GitHub open-source address: https://github.com/Lidang-Jiang/UniversityResearcherProfiles

## **Project 11: Government-Enterprise Platform V3.1**

2025.05.15-2025.05.31

- Module (Front-end): Government Data Intelligent Management Suite
- **Project Background**: Added data status tracking, batch approval and other features to solve cross-department data coordination challenges.
- Technology Stack:
  - Front-end: Vue2 + Element-UI
  - State Management: Vuex
  - Build Tool: Vite
- Core Implementation:
  - 1. Batch Approval:
  - 2. Data Status Tracking List:
    - List CRUD operations

- Module (Front-end): Intelligent Report Editor and Template Management Center
- **Project Background**: Government hotline report automation system, enabling intelligent generation of structured reports from work order data, solving pain points of low efficiency in manual report preparation and inconsistent formats
- · Technology Stack:
  - Front-end: Vue2 + Element-UI + Quill
  - State Management: Vuex
- Build Tool: ViteCore Contributions:
  - 1. Intelligent Template Management System:
    - Table CRUD operations
    - 2. Interactive Report Template Editor:
      - Developed extensible table component: supporting dynamic rows and columns and linking to external data operations
      - Developed extensible deepseek instruction dialog component: supporting deepseek instruction insertion

## Project 9: 928 Hospital - Model Command System V2.0

2025.03.31 - 2025.04.09

- Module (Front-end): To-Do Items Module
- **Project Background**: Added to-do items module to establish closed-loop task supervision mechanism. Solved V1.0 issues of scattered task management, cross-department collaboration difficulties, and progress tracking blind spots.
- Technology Stack:
  - Front-end: Vue2 + Element-UI
  - State Management: Vuex
  - Build Tool: Vite
- Main Contributions: Core Feature Development:
  - \* Implemented dual-view mode for tasks (Created by Me/Executed by Me), supporting different operation permissions for creators and executors
  - \* Developed department tree selection component, supporting three-level department structure (Level 1 > Level 2 > Level 3)

## **Project 8: Risk Monitoring and Early Warning System Common Service Platform V1.0.1** 2025.03.10 - 2025.03.21

- Module (Front-end): Warning Model Management System CRUD Module
- **Project Background**: Restructured core modules of government-level risk warning platform, establishing warning linkage mechanism. Solved V1.0.0 issues of scattered model management and poor multi-source data adaptability.
- · Technology Stack:
  - Front-end: Vue2 + Element-UI
  - State Management: Vuex
  - Build Tool: Vite
- Main Contributions:
  - Core Feature Development:
    - \* Implemented three-state filtering mechanism, supporting dynamic switching between "All/Warned/Not Warned"
    - \* Built model type-entity type linkage component, automatically populating warning names based on tree-structured data

## Project 7: Red Detachment of Women Memorial Park Digital Platform V1.2.0 2025.02.25 - 2025.03.06

- Module (Front-end): Multi-terminal collaborative development (Official Chinese Website/Youth Version/Admin Panel)
- **Project Background**: Experience upgrade based on V1.0, focusing on restructuring the visiting service process, achieving data intercommunication across three terminals. Solved V1.0 issues of poor compatibility and lengthy reservation process.
- Technology Stack: Vue2 + Vuex + Element-UI
- Main Contributions:
  - Core Feature Restructuring:
    - \* Designed and implemented a unified reservation service system across three terminals:
      - Secure document download: implemented server-side rendering of Word templates

## Project 6: Government-Enterprise Platform V2

- Module (Front-end): Enterprise Data Validation Module
- **Project Background**: Government enterprise data verification platform, providing enterprise information verification services for government, banks and other institutions. By connecting to the National Market Entity API, it enables batch verification of enterprise names and unified credit codes, solving the pain point of inefficient manual verification.
- Technology Stack:
  - Front-end: Vue2 + Element-UI + Axios
  - Engineering: Vite + ESLint + Prettier
- Main Contributions:
  - Core Feature Development:
    - \* Implemented batch import functionality for Excel files, supporting parsing of two data structures: Table 1 (Basic Information) and Table 5 (Credit Information)
    - \* Developed real-time validation progress display component, including progress bar, success/failure data statistics, and remaining API call count display

### Project 5: Project Platform Management System V2.6

2025.01.13 - 2025.02.06

- Module (Front-end): Mobile "Approval Center" module development
- **Project Background**: This project is the company's internal project management platform, covering multiple approval processes and management functions. V2.6 version added the "Business Opportunity Approval" feature to better manage and review the company's business opportunities.
- Technology Stack:
  - Mobile: Vue2 + Vue Router + Pinia + Vant + ESLint + Prettier.
- Main Contributions:
  - Approval Center Module Development:
    - \* Responsible for developing the mobile "Approval Center" module, supporting viewing and managing various approval tasks, such as business opportunity approval, overtime task approval, contract approval, etc.

## Project 4: Digital Campus System V2.0.5

2024.12.13 - 2024.12.24

- Module (Front-end): PC-side work assignment settings and WeChat public account delegation verification and push module development
- **Project Background**: The Digital Campus System aims to provide schools with a comprehensive management and service platform to improve the work efficiency of head teachers and parents, ensuring student safety and management convenience. The project covers both PC and WeChat public account platforms, implementing class duty management and student pickup delegation verification functions respectively.
- Technology Stack:
  - Front-end: Vue2 + Vue Router + Vuex, Element-UI, uni-app
  - Tools: ESLint, Prettier, Git
- Main Contributions:
  - PC-side "Work Assignment Settings" Module:
    - \* Table management CRUD
  - WeChat Public Account "Delegation Verification and Push" Module:
    - $* \ \, \text{Implemented QR code verification function, allowing delegates to enter the verification page by scanning QR codes}.$
    - \* Designed and developed delegation verification form, including student name, delegate name, phone number and SMS verification code, ensuring accurate submission of information.

## Project 3: Red Detachment of Women Memorial Park Digital Platform V1.0

2024.11.11 - 2024.11.30

- Module (Front-end): Multi-terminal front-end module development
- **Project Background**: Development of Red Detachment of Women Memorial Park digital platform, including admin panel, PC client and youth PC client, providing visit services, study tour activity management, transportation guides and other functions to enhance users' online interaction and service experience.
- Technology Stack: Vue2 + Vue Router, Element-UI, Vant, ESLint, Prettier.
- Main Contributions:
  - Admin Panel:
    - \* Responsible for "Study Tour Registration Management" module development, including add, edit, publish and other functions
    - \* Implemented dynamic form functionality for study tour activities, supporting rich text editing and attachment upload for title, remarks, and content.

#### - Youth PC Client:

\* Responsible for "Visit Services" section development, displaying visit guidelines, reservation visits and other module content.

## **Project 2: Project Operation Management Platform V2.5**

2024.10.22 - 2024.11.20

- Module (Front-end): PC and mobile vehicle management functionality development
- **Project Background**: Internal enterprise vehicle management system, covering both PC and mobile platforms. Mainly used for vehicle usage management and statistics, including permission management, data filtering and export functions.
- Technology Stack:
  - PC: Vite + Vue2 + Vue Router + Pinia + Element-UI + Husky + ESLint + Stylelint + Prettier.
  - Mobile: Vue2 + Vue Router + Pinia + Vant + ESLint + Prettier.
- Main Contributions:
  - PC Platform:
    - \* Responsible for "Vehicle Reports" module development:
  - Mobile Platform:
    - \* Responsible for "Workbench", "Approval Center", and "Vehicle Management" module development:
      - Workbench: Implemented mobile user homepage with data overview and common function entries, optimized page loading speed and interaction experience.
      - · **Approval Center**: Developed query and operation functions for approval tasks, supporting task filtering, status updates and instant feedback, improving approval efficiency.
      - · **Vehicle Management**: Implemented the complete process of vehicle application and approval, covering vehicle application records, vehicle usage status monitoring and other functions.

## Project 1: Haikou Police Administrative Knowledge Base

2024.07.25 - 2024.09.25

- Module (Algorithm): RAG System Construction and LLM Evaluation
- **Project Background**: Developed an intelligent administrative knowledge base for Haikou Police System, employing Retrieval-Augmented Generation (RAG) technology to enhance the accuracy of large language models in responding to administrative knowledge queries, addressing issues such as low retrieval efficiency and inconsistent answer quality in traditional knowledge bases.
- · Tech Stack:
  - RAG System: Embedding Models + Vector Database (Milvus) + TeleChat LLM
  - Evaluation Tools: Self-developed Evaluation Framework + Data Processing Scripts + Result Visualization
- Main Contributions:
  - Knowledge Base Construction:
    - \* Participated in administrative data cleaning and structured processing
  - LLM Testing and Optimization:
    - $* \ \ Conducted \ large-scale \ answer \ quality \ testing, \ collected \ and \ analyzed \ model \ responses \ to \ 20000+\ real \ administrative \ queries$