Yibing Zhou

1369647561@qq.com
+86 13786600727
GitHub
CSDN Blog

Education

2022.09 – Present **Harbin Institute of Technology** Software Engineering.

Project Experience

WeChat Food Ordering Mini-Program Development
Backend Development | Harbin Institute of Technology (Weihai) | August 2024 - December 2024

- Integrated the functionality of the WeChat platform to provide users with convenient **online ordering services** and efficient **order management tools** for merchants.
- Used Node.js and Express framework to build RESTful API interfaces, implementing user registration, login, menu browsing, and dish addition/deletion functions; utilized MySQL database to store user information, order data, and restaurant menu details.
- Designed and implemented core functionalities including user authentication, product classification queries, shopping cart operations, ensuring smooth and secure front-end and back-end interactions.
- Implemented JWT (JSON Web Tokens) mechanism for user authentication, ensuring user information security; used HTTPS protocol to transmit sensitive data, preventing man-in-the-middle attacks.
- **Completed multiple version iterations within the project cycle, continuously improving user experience and backend management system functions.** Expected project completion in December 2024.

Intelligent Travel Planning Assistant Based on Large Language Models
Project Creation and Deployment | Harbin Institute of Technology (Weihai) | March 2024 - May 2024

- Developed an intelligent travel planning assistant based on a large language model (LLM) to provide personalized, efficient, and convenient travel planning experiences for users.
- Utilized Alibaba Cloud Magic Tower Community's qwen-7b large language model without fine-tuning parameters.
- Built a comprehensive travel knowledge graph as the foundation of the assistant's knowledge base, used for understanding and recommending relevant travel information.
- Configured the framework to handle user input, process information, and generate appropriate travel planning suggestions, maintaining seamless communication with the front-end interface.
- Launched the assistant application in Model Scope innovation space, demonstrating its functions and won the "**Team Third Prize.**"

Research Experience

Time Series Modeling
Undergraduate Researcher | Harbin Institute of Technology (Weihai) | Oct. 2023 - Present

Supervisor: Prof. Chao Guoqing

- Conducted in-depth studies on classic literature and the latest research findings in time series analysis, including but not limited to ARIMA models, LSTM neural networks, and the application of attention mechanisms in time series forecasting.
- Participated in the development of the project "Time Series Anomaly Detection Based on Deep Learning," responsible for data preprocessing, feature engineering, and model training.
- Maintained regular communication with the supervisor, providing timely feedback on project progress to ensure consistency and efficiency in the research direction.

Neural Computing Modeling
Intern | Peking University | January. 2025 - February. 2025
Supervisor: Prof. Wu Si, PhD Zhang Tianqiu

- Learne various modeling methods for synapses and networks, roughly mastered the basics and applications of BrainPy programming, understood BrainPy architecture and dynamic variable processing, familiar with classic models such as HH model.
- Constructe an SNN network based on BrainPy and compared its performance with NEURON, NEST, Brian2, ANNarchy, BindsNet, SpikingJelly, and Norse to demonstrate the advantages of BrainPy.
- Design experiments to compare BrainPy and PyTorch frameworks in terms of dedicated operator performance, compilation time, and training speed.

Skills

- Strong reading, writing, and speaking abilities in English and Mandarin.
- Proficient in C and Python programming languages; have a basic understanding of the PyTorch framework for deep learning.
- Familiar with the Linux operating system, including basic command-line operations and Shell scripting.
- Experienced in version control using Git; strong team collaboration and self-learning skills.

Miscellaneous Experience

Main Awards & Achievements

2023/12 **Provincial First Prize**, National Collegiate Mathematics Competition.
2024/05 **Honorable Mention**,2024 Interdisciplinary Contest In Modeling(MCM).

Main Scholarships & Honors

2023/11 **Huawei "Intelligent Base" Scholarship** (Top 1.7%).
2024/10 **Outstanding Student Role Model**, Harbin Institute of Technology (Top 0.3%).