**Originality Disclaimer**

I solemnly declare:

The entry《 RiskHunter – Multi-dimensional Data-Driven Foreign Exchange Risk Prediction System》submitted by our team for the 20th "Citi Cup" Financial Innovation Application Competition (hereinafter referred to as "Citi Cup") was the real results which were independently researched and developed by team members under my leadership (or guidance). Except for the content cited in the entries, the entries do not involve works published or written by any other individual or collective, and there is no illegal behavior such as plagiarism of other people's works or infringement of the intellectual property rights or other rights of any third party.

I and the team members have clearly understood that if the entry infringes upon the intellectual property rights or other rights of any third party, I and the team members will bear all the resulting consequences (including but not limited to cancellation of the 20th "Citi Cup" qualifications, cancellation of awards received, etc.) and corresponding legal responsibilities.

**文本

AI 生成的内容可能不正确。**图片包含 游戏机, 虫, 画, 空气

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Signature of the captain (or instructor): \_\_\_\_\_\_\_\_\_ \_\_\_

Date: 2025. 3. 23

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| **Self (or instructor) evaluation of the entry**  **(Advantages and disadvantages, as well as follow-up plans, etc.)** |
| **I. Evaluation of Innovation and Advantages of the Work**  This work demonstrates significant innovation and practical value in the field of foreign exchange risk management, with the following core advantages:   * **Academic Innovation:** It applies the DeepSeek LLM to the processing of alternative financial data, and innovatively constructs a **"text-policy-market"** multimodal analysis framework. Additionally, it originally optimizes the input parameter system of the **LSTM-DCC-GARCH** hybrid model, achieving a balance between forecasting accuracy and interpretability. * **Technical Integration Leadership:** By leveraging RAG technology, the work effectively addresses the hallucination problem of large models and achieves zero-cost deployment of private knowledge bases. It integrates APIs from several large models such as **DeepSeek and Qwen**, combines stream output and prompt engineering to deliver low latency responses in dialogue functions and accurate professional advice. The responsive web development integrates six key functional modules including risk visualization and intelligent decision support, resulting in a one-stop foreign exchange risk management platform that has already been deployed on the public network. * **Strong Commercial Viability:** The risk signal response speed shows more than one order of magnitude improvement over traditional signals. With low model training costs and website development expenses—using open-source APIs and crawlers to capture the latest market trends—the work adopts a free basic service plus value-added subscription model to lower usage barriers. Additionally, using questionnaires and surveys to identify personalized user needs, user training time has been practically reduced to under five minutes.   **II. Existing Shortcomings and Improvement Directions**  The current version requires optimization in the following areas:   * **Depth of Model Training:** Limited by computational resources, the historical data training set covers a 20-year period, and there is a potential to optimize the related coefficient prediction error rate by 0.8%. * **Terminal Adaptability:** While the responsive web design supports mobile access, it still falls short compared to native mobile apps and mini-programs. * **Data Compliance Boundaries:** The authorization agreements for crawler data sources need further standardization, with the current compliance coverage at 85%.   **III. Future Development Plans**   * **Model Iteration Plan:** By Q2 2025, a backtest covering 10 years of historical data will be completed. The Transformer architecture will be introduced to optimize the sequential prediction module, with the goal of reducing the prediction error rate to within the top 5% in the industry. * **Terminal Ecosystem Development:** A WeChat mini-program will be launched in Q3 2025 (with support from Tencent Cloud), and simultaneous development of iOS/Android apps is planned to achieve real-time data synchronization across multiple terminals. * **Service Ecosystem Expansion:** The project will establish a foreign exchange risk management knowledge community and develop an enterprise-level API interface, with plans for strategic cooperation with three cross-border payment platforms.   **IV. Overall Evaluation**  The project successfully integrates cutting-edge academic technology with practical industrial needs, creating significant technological barriers in areas such as forecasting model optimization, large model application paradigms, and system integration architecture. Although there are temporary limitations in data depth and terminal adaptability, clear plans for technical evolution and commercial expansion have already been laid out, indicating strong sustainable development potential. Its open-source strategy throughout the entire process further underscores its academic public welfare value, providing an innovative paradigm for industry-academia research and collaboration in the fintech sector. |