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⚙ https://github.com/Blade0809

EDUCATION

- **Shanghaitech University**   *2025.9-now*
  Master of Computer Science   Shanghai, China

- **Chinese University of Hong Kong**   *2023.6-2023.8*
  Exchange Program   Hong Kong

- **Chongqing University**   *2021.9-2025.6*
  Bachelor of Data Science&Mathematics(Double major)   Chongqing, China

PROJECTS

UTVis: Urban Traffic Visualization: UTVis is a visualization platform of city intersection traffic situation. I was mainly responsible for the 3D visualization part and implementation of traffic situation algorithm. I mainly implemented the construction of 3D scenes and the visual rendering of traffic behaviors, including the loading, movement and destruction of models, and the optimization of rendering algorithms. I also implemented the traffic prediction part of the traffic situation algorithm, mainly using deep learning methods, such as LSTM, Transformer, etc. Moreover, I used Vue+Vite to build the overall framework of the project. The total workload for these implementations is around 7K LOC, contributing to the entire project's approximately 22K LOC.

SPNN: Swing Prediction Neural Network Based on BP-Performance Evaluation System: Leveraging the objective weighting capability of neural networks, I use the BP neural network model to establish a "momentum" evaluation model. Specifically, I used the properties of local Markov chains combined with backpropagation neural networks to achieve a more accurate prediction of the trend of a game. The accuracy of the constructed model is better than traditional models such as ARIMA and LSTM. This model can also describe the trend of a game by learning the weight of the impact of various behaviors on the game results during the game.

CCVis: Cybersecurity Competition Visualization System: CCVis is based on the Anheng DasV visualization platform to build a large visual screen that comprehensively displays event information. I was responsible for implementing the use of WebSocket to transfer real-time information between the front end and the back end. Specifically, it includes the display of real-time information, changes in player rankings, and the processing of asynchronous information.

COURSES AND SKILLS

Data Science Courses: Data Structure and Algorithms(91), Database(90), Computer Network(86), Statistical Analysis(96), Machine Learning(93), Computer Graphics(94), Principles and practice of cryptography(90), Data Mining(88)

Maths Courses: Mathematical Analysis, Advanced Algebra, Real Analysis, Ordinary Differential Equation, Partial Differential Equation, Probability

Programming Skills: C++, Python, Java, HTML/CSS/Javascript, Pytorch, React, Flask, Vue, Node.js, Markdown, LaTeX, D3.js, Blender, Three.js, Echarts, MySQL, Git

AWARDS

- **CQU Outstanding Undergraduate Student**

- **2023 CQU First Class Scholarship**(Ranked Top 3%)

- **14th and 15th CMC(The Chinese Mathematics Competitions) First Prize**(Ranked Top 1%)