PERSONAL PORTFOLIO

As a student at Northeastern University,

I specialize in deep learning and large language models. I'm excited to showcase my work and experience in this personal portfolio.

Catalogue

1 **Interdisciplinary Contest in Modeling: Modeling: Riding the Storm, Building for Tomorrow Tomorrow**

Predict the frequency of of disasters and construct a construct a Risk Loss Index. Index. Modify the decision decision matrix model for for property developers. developers. Develop a building value assessment assessment and protection protection model for community leaders.

2 **Intelligent Temperature Control System for Communication Stations**

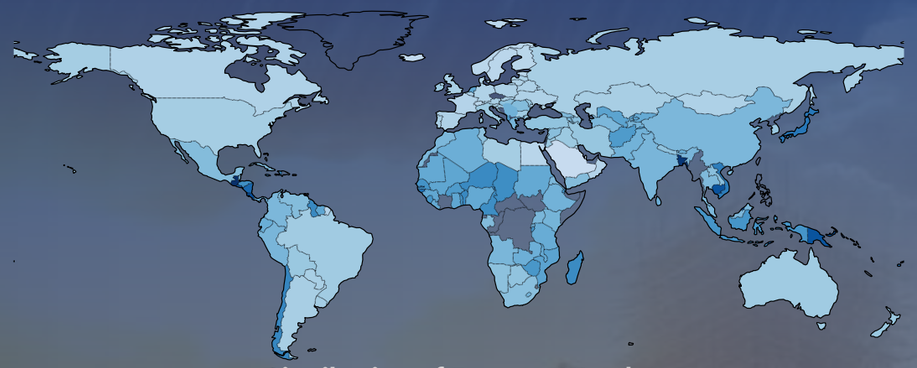
Design a system to control air conditioning and other equipment in communication stations, aiming to achieve energy-efficient temperature regulation.

3 **A TCM healthcare assistant based on the Qwen1.5-14B: TCMGPT**

It offers multi-round consultations, voice interactions, and image production. It leverages LLama_factory for LoRA fine-tuning and RAG to enhance QA capabilities for long texts. Additionally, it utilizes Playground v2.5 models for image generation.

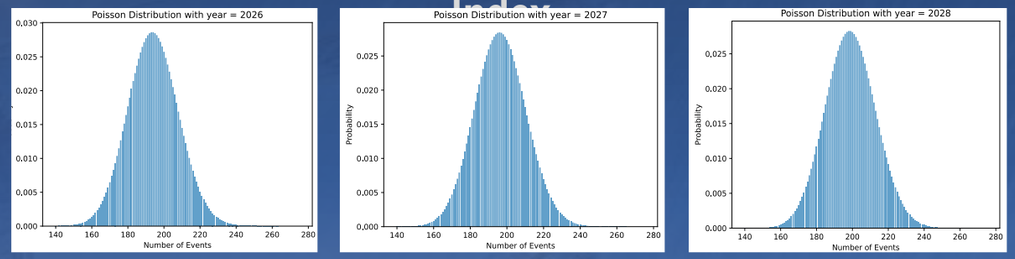
Riding the Storm, Building for Tomorrow

Data Collection and Processing

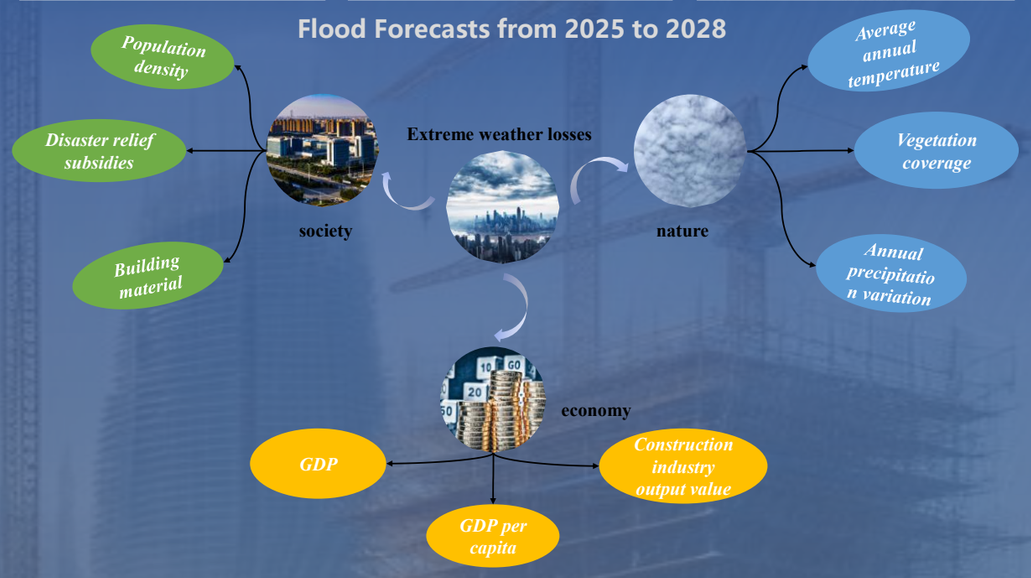


Distribution of Extreme Weather

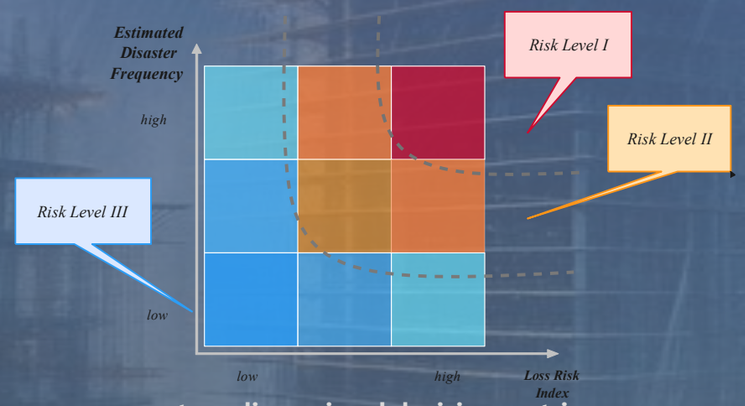
predict the frequency of disasters and construct a Risk Loss Index



Flood Forecasts from 2025 to 2028



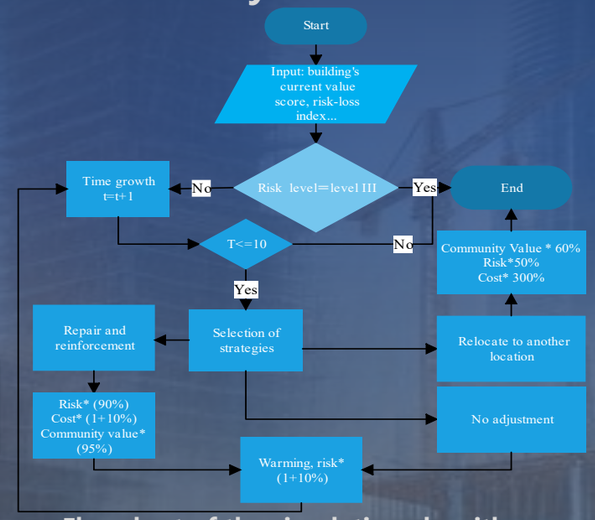
Structure of risk indicators



two-dimensional decision matrix

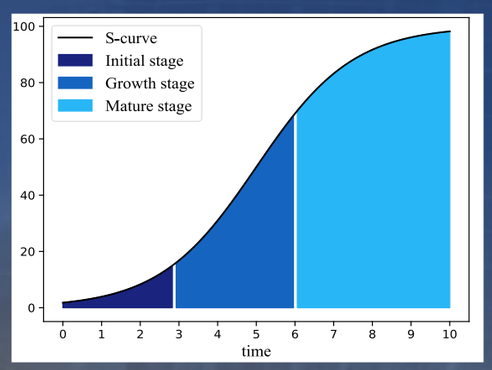
a building value model for community leaders

Figure X Hierarchy of Measured Value

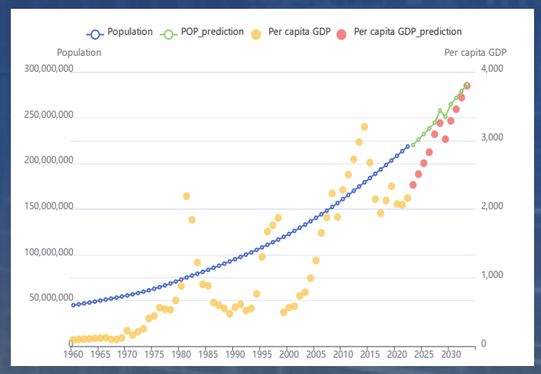


Flowchart of the simulation algorithm

Real Estate Investment Adjusted Model



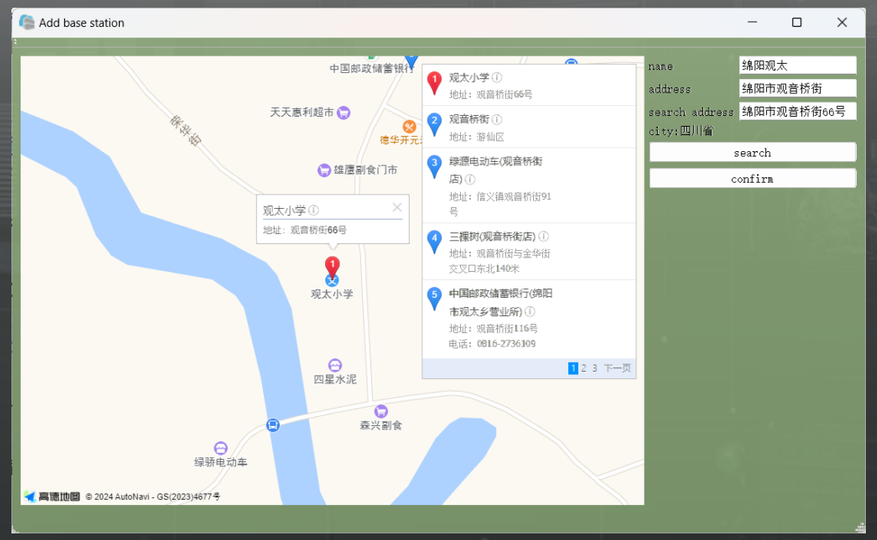
Trends in population growth



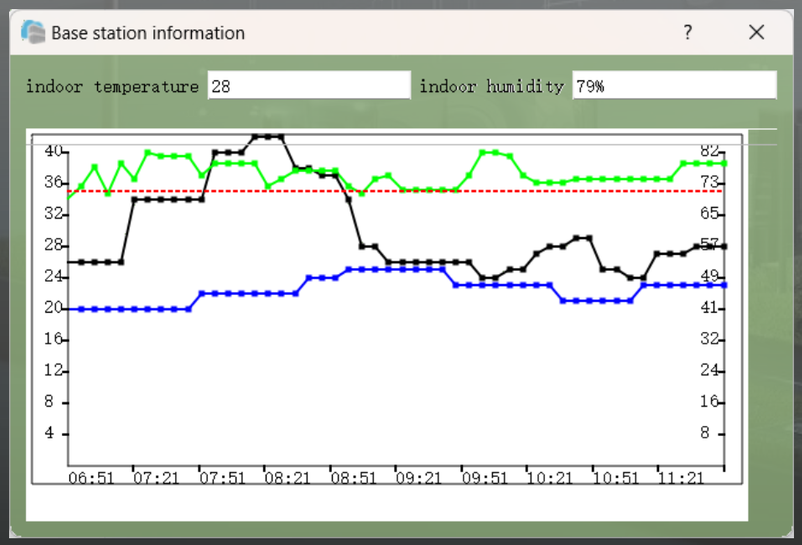
Population and GDP per capita fit

Intelligent Temperature Control System for Communication Stations

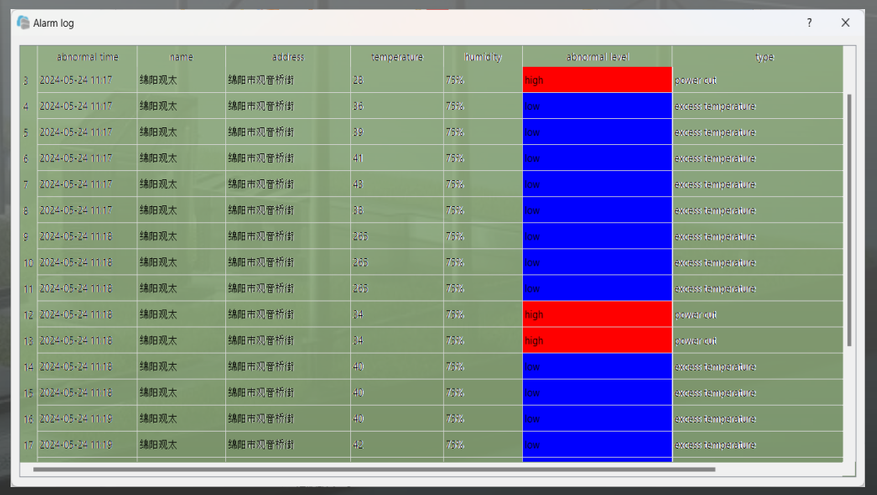
Display the base station name, location, and status information, including temperature and humidity. Also, control the air conditioning temperature.



Click the “Add” button on the main interface to open the screen for adding base stations using addresses found through Amap search.

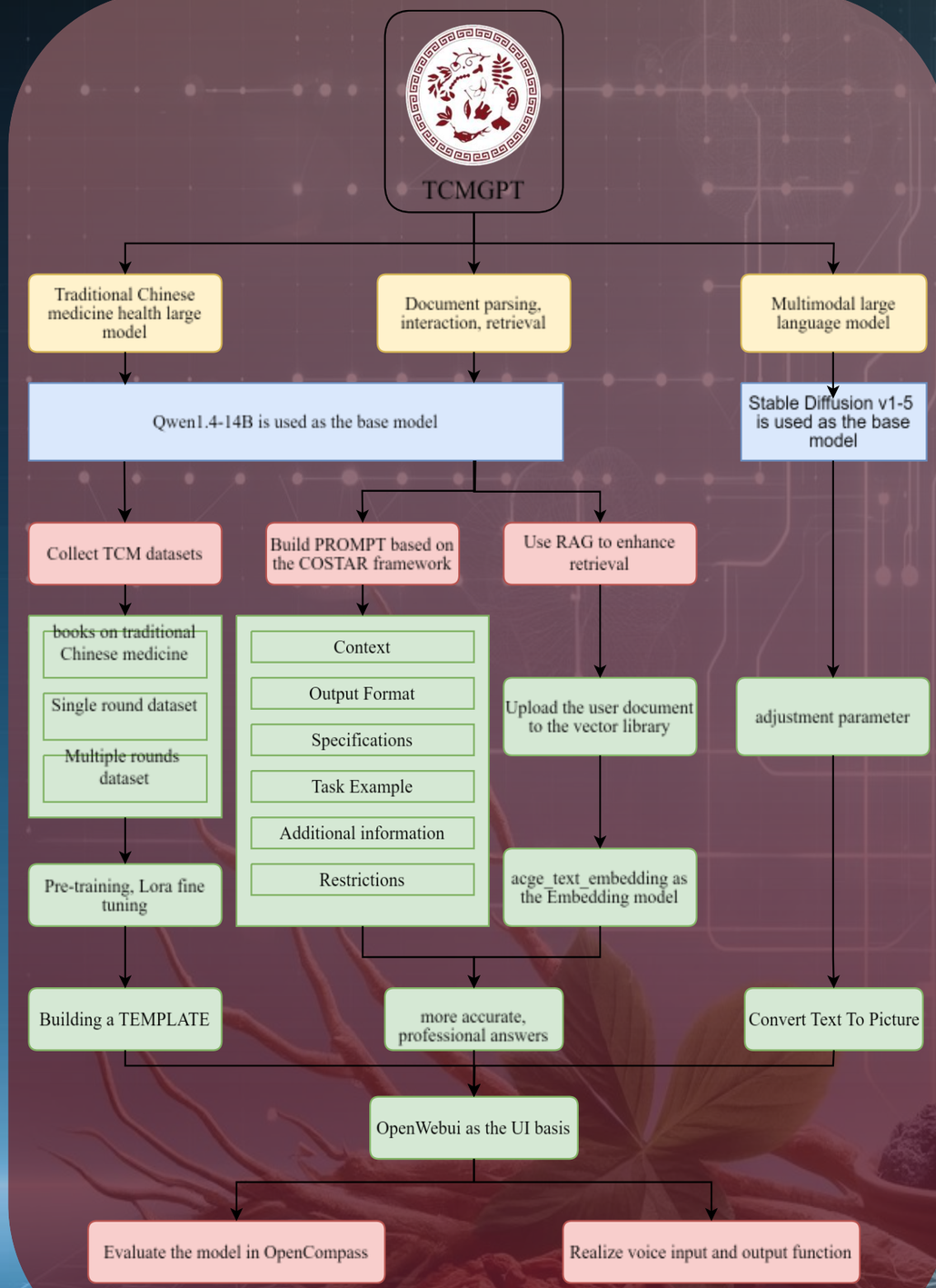


Click the “Detail” button on the main interface to open the screen displaying the temperature and humidity information of the corresponding base station.

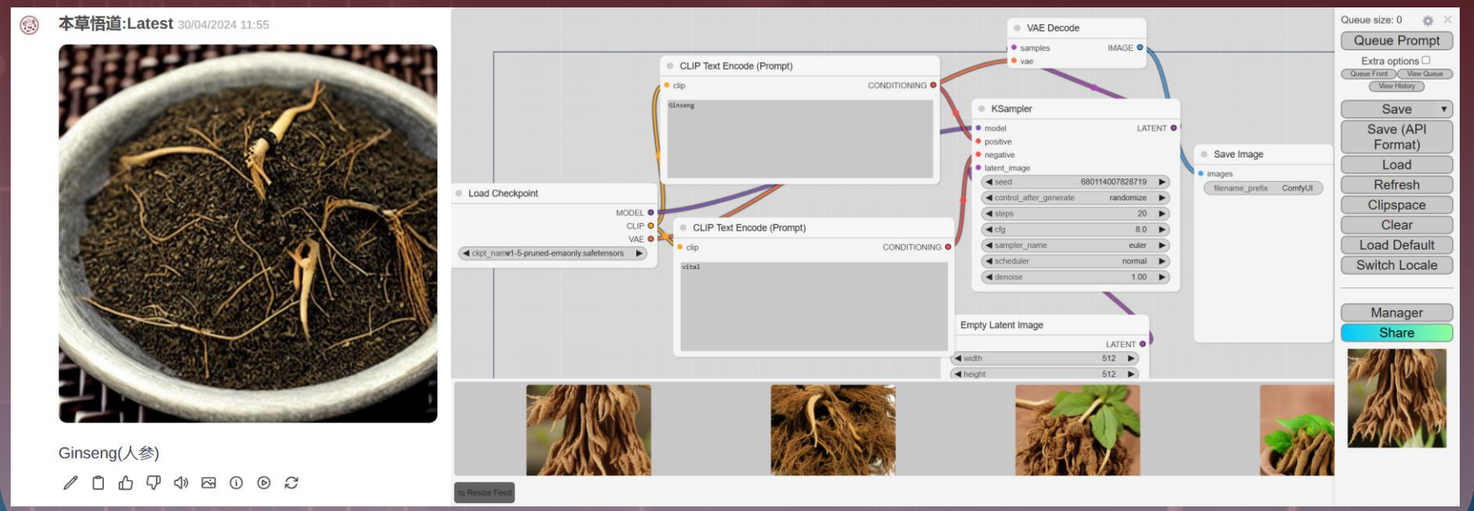


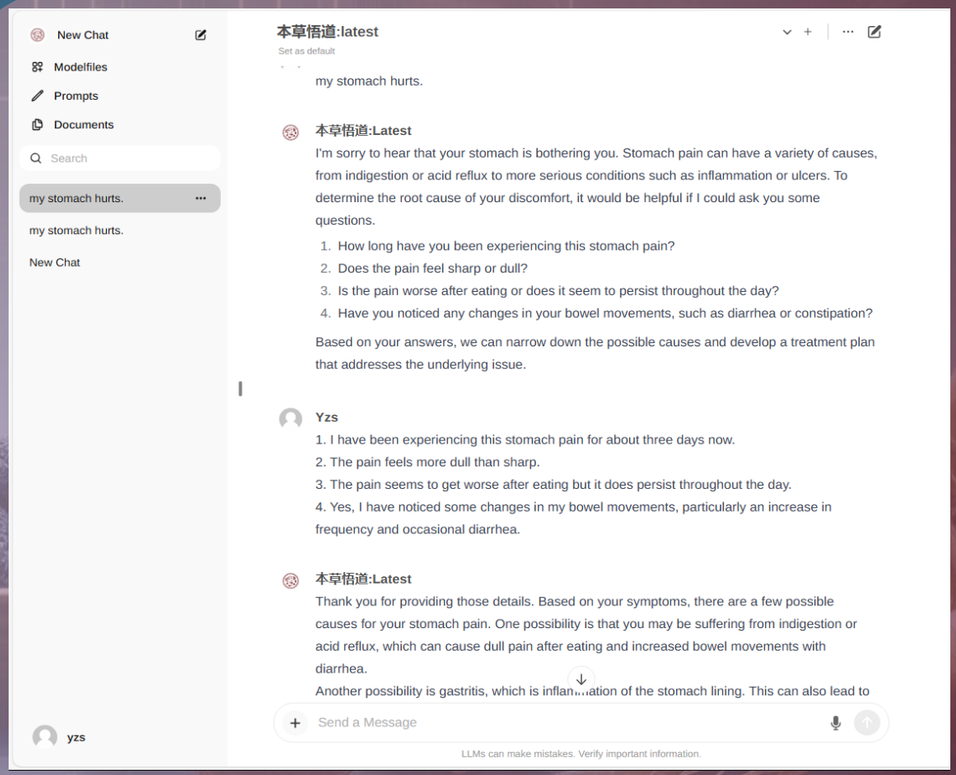
By clicking the “Alarm Log” button, this interface displays all the recent alarm information.

TCMGPT



Customize positive and negative conditions, as well as other restrictions, to control the output of the image. Generating images of medicinal materials makes it convenient for users to identify and learn about medicinal materials.





1. The multi-round question and answer function is implemented, enhancing the model's understanding of the user's situation.

2. The voice interaction function is implemented, making it more convenient for users to use.

END

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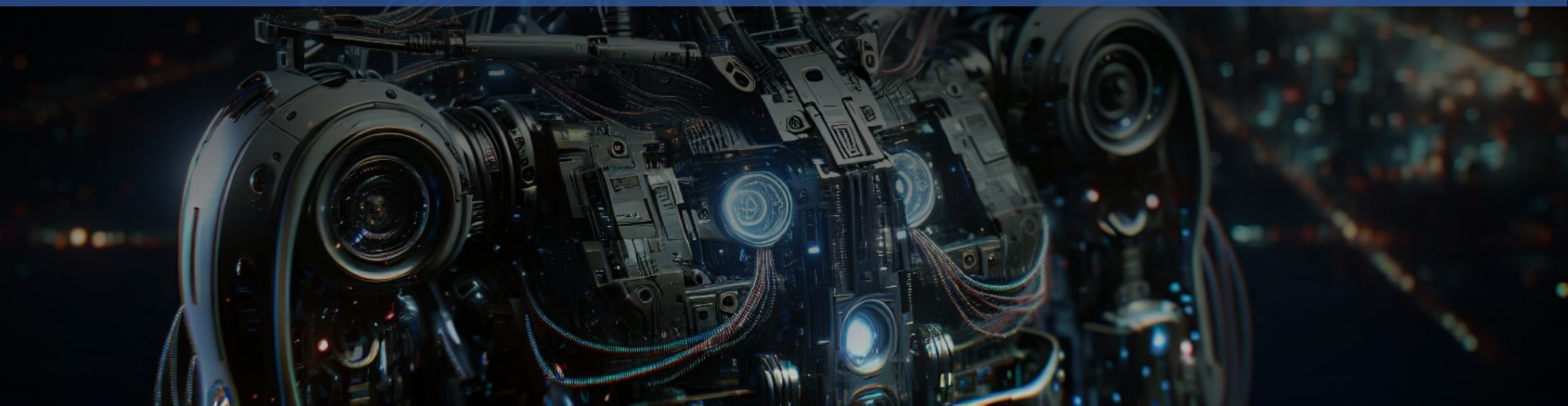
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