With the current epidemic under control, Shanghai reopened a number of tourist attractions to visitors in June this year. If a tourist attraction is overcrowded, it can also affect the visitors’ experience to a certain extent.

The project aims to design a system that will enable users to scan QR codes at tourist attractions to get real-time visitor counts, trends for the next two hours and recommendations for less-visited attractions. In this way, visitors can use it as an important reference in deciding whether to visit this tourist attraction.

The project uses real Shanghai visitor data to build an LSTM model for visitor number prediction, while the project uses Vue.js to build the front-end pages and Django to build the back-end code.

The system evaluation considered the performance of the LSTM model in terms of number prediction and in terms of the overall response time of the system. The preliminary work in this dissertation is promising and the system design is feasible and scalable for application in the tourist attractions mentioned in Shanghai.