SU LI

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EDUCATION

UNIVERSITY OF CALIFORNIA, SAN DIEGO
Master's Degree | Computer Science and Engineering　　　　　　　　　　　　Expected Jun./Dec. 2022
- GPA: **4.00/4.00**

UNIVERSITY OF ELETRONIC SCIENCE AND TECHNOLOGY OF CHINA
Bachelor's Degree | Automation　　　　　　　　　　　　　　　　　　　　　　June 2019
- GPA: **3.96/4.00**　　Ranking: **3/173**
- National Scholarship
- **Outstanding Graduate　Honor Student**

WORK EXPERIENCE

BYTEDANCE, China, Beijing　　　　　　　　　　　　　　　　　　　　　March-July 2021
Software Engineer, Intern
Project I: Marketing web pages
- Using **React**, **Typescript** and **Less**, I developed 10-15 pages and the interaction between them for marketing activities.
- To speed up information interaction between pages, I refactored the way of communicating from using query to using centralized front-end database which greatly reduced code line and improved work efficiency.

Project II: Log-in system
- Built the front-end of a log-in system for a mini-program in WeChat, which brought about 10% website traffic growth.

Project III: Poster Rendering
- Re-designed the rendering algorithm for fast rendering of car posters in front-end. The algorithm reduced time complexity from $O(n^2)$ to $O(n)$. It turned out to be **100** times faster than before and greatly reduced the responding time.
- Addressed the problem of line wrapping when dealing with different character set.

PROJECT EXPERIENCE

MAHJONG GAME SUGGESTION PAGE
- Using **Django, MySQL, React,** I built a website that could give potential good suggestions for a mahjong player. The suggestions were based on Graph Theory. Every game state is considered as a node in a graph. The algorithm always tries to find the potential maximum-expectation path in the graph and gives good suggestions accordingly

COMPETITION

GAME PLAY PREDICTION　　　　　　　　　　　　　　　　　　　　　　　Fall 2020
https://www.kaggle.com/c/cse158258-fa20-play-prediction/leaderboard
Ranking: **2/672**
- Built a recommender system that predict whether a user would buy a game on steam according to purchase histories.
- Invented a Soft-Bayesian-Personalized-Ranking algorithm that over-perform than normal one-class method.

MATHEMATICAL CONTEST IN MODELING
FORECAST ON ENERGY STRUCTURE BASED ON IMPROVED MARKOV CHAIN　　　Feb. 2018
Awarded as Meritorious Winner **(top 8.88%)**
- Improved Markov Chain to make it continuous and suitable for continuous value predicting.
- Proposed an energy structure forecasting system for four U.S. states. Gave practical suggestions on energy structure.

RESEARCH

FULLY CAPSNET FOR SEMANTIC SEGMENTATION [C]. The First Chinese Conference on Pattern Recognition and Computer Vision. Guangzhou, China, 2018
- Introduced Dynamic-Routing algorithm to fully convolutional network that increased the IOU by about 10 percent.
- The paper is published on the First Chinese Conference on Pattern Recognition and Computer Vision.

SKILLS

- Computer Language: C++, Python, ECMAScript, TypeScript, CSS, HTML
- Framework: Node.js, React.js, Vue.js, Less.js, TensorFlow, PyTorch, Numpy, other basic Python tools.