Chang Huang

Tel: (636) 312-8888 | Email: ch1075@scarletmail.rutgers.edu
Address: 2827 BPO way Buell apartment, Piscataway, NJ 08854

Self-Summary

- Languages: C++, Java, Python, Markdown
- Technologies: MySQL, Redis, Unity 3D, Blender, Git, Adobe Premiere Pro
- Frameworks: Spring Boot, Spring, PyTorch, Tensorflow

Education

Rutgers University (New Brunswick) **Sept. 2022 - May. 2024**
- **Degree:** MS in Computer Engineering **GPA:** 3.58 / 4.0
- **Activity:** Grader (Analog Electronics course)

Tiangong University (China) **Sept. 2018 - Jun. 2022**
- **Degree:** BS in Applied Physics **GPA:** 3.34 / 4.0
- **Honor:** Excellent Student Leader (2018 - 2021)

Experience

Tsingke Zhirong Technology Co., Ltd. (China) **Jul. 2023 - Spet. 2023**

Software Development Engineer Intern

AI avatar Lanka (WeChat applet):

- Implemented efficient cache management using Google Guava to reduce database overhead and ensure users quickly access the latest model lists upon login, resulting in optimized performance for a fixed model list. Additionally, improved user experience by prioritizing image preloading and displaying text content promptly.
- Mapped interface entity classes and Mapper file fields for 12 database tables, enabling seamless CRUD operations through Swagger testing.
- Upload Alibaba Cloud OSS and collaborate with the front-end for interface debugging, then use WeChat developer tools for testing and adjustment the avatar.
- Implemented user-based charging functionality using WeChat Payment SDK, integrating WeChat user registration authentication to accurately track user usage and billing.
- Designed visually appealing Feishu cards and leveraged Feishu's custom reminder bot to create an effective payment reminder feature for Mini Program users.
- Use the Alibaba Cloud service platform to send random user verification codes, save them in the database, and return them to the front end for verification.

PROJECTS

Interactive FPS Game **Feb. 2023 - May. 2023**
- Background: A FPS game that use keyboard and mouse to control and shoot AI enemies, finally transplant it to VR device.
- Designed a Unity 3D environment featuring a vast map with dynamic weather patterns and adaptive lighting. Created character and AI models using Blender. Developed three weapon models (rifle, sniper rifle, and pistol) with C# and UGUI, enabling realistic shooting mechanics and sound effects.

Stock Market Prediction **Jul. 2021 - Aug. 2021**
- Background: Implement BP neural network in LMS algorithm to predict stock trends for Apple and Tesla.
- Utilized Python with modules like Sklearn and Keras to import, preprocess, and split CSV datasets for stock trend prediction. Built neural networks with specified Optimizer, Loss, and Metrics, and successfully demonstrated improved model performance through accurate stock trend predictions.
- Publication: *Stock Market Forecasting Based on Neural Networks*, SPIE 12079

OnlineOrderRestaurant **Sept. 2022 – Feb. 2023**
- Background: This is an online food ordering website where users can register, select restaurants and place their orders. User can make their own decision along with an option to provide feedback about specific dishes. Additionally, the website has payment integration to facilitate user transactions.
- Backend: Java Springboot utilizing Mybatis-plus for database connectivity with Alibaba's DruidDataSource and Swagger tools for user and restaurant configuration.
- Frontend: CSS and JavaScript are utilized to layout the website design with an additional custom toolbar to provide options such as title background color, list layout distribution, and font.