Xiao Wang

(315) 278-8449
Syracuse, NY
wangxiaojobhunting@gmail.com

GitHub:WangXiaoShawn
LinkedIn: Xiao Wang

Software Developer

EDUCATION

Syracuse University |College of Engineering & Computer Science   **May 2023**
MS of Computer Science   GPA:3.861

Bentley University |McCallum Graduate School of Business   **May 2015**
MS of Marketing Analytics & Business Analytics certificate   GPA:3.59

KEY SKILLS

Programming Languages: Proficient in C, C++, Python, Haskell, SQL.

Applications/Technologies: Skilled in Git, Docker, Linux-based system programming, multi-threading programming, functional programming, and implementation of network protocols.

Coursework: High grades in Computer Architecture (A), Operation Systems (A-), Multi-Thread Programming (A), System Programming (A), Internet Security (A).

PROFESSIONAL EXPERIENCE

Position: Data Systems Engineer   **2015 Sep—2021 May**
SHAANXI HAINA ELECTRONIC TECHNOLOGY CO., LTD   *China*

- Developed and deployed a MySQL-based C++ API, providing flexible and efficient database services to cater to diverse business needs, significantly improving data management capabilities.
- Implemented a file transfer system via a self-developed C++ API, which enhanced data aggregation and information warehousing for 27 small businesses, leading to improved data utilization and efficiency.
- Enhanced database performance by optimizing data storage and query efficiency through designing robust database structures, including table designs, indices, and stored procedures, improving system reliability and data retrieval speed.
- Applied data analysis techniques and modeling methods to deliver valuable business insights such as customer feature extraction, capacity forecasting, and company assembly line strategy simulation, contributing to better business decision-making and operational efficiency.

TECHNICAL EXPERIENCE

Optimizing Multi-threading & processing with C++: Building an Efficient File Transfer System
The source code is available on GitHub at File-Transfer.

- Engineered a secure, adaptable C++ file transfer system for internal and external networks.
- Innovated FTP and TCP protocols to address packet sticking and incorporated adaptive multi-threading/multi-processing.
- Enabled both batch and incremental transmission modes for versatile file transfer.
- Achieved over 50x speed increase in file transfers, maintaining stringent security standards.

Database Management & Synchronization with C++: Boosting Efficiency and Storage Utilization
The source code is available on GitHub at Database-Management.

- Devised an automated C++ system for MySQL storage and retrieval, supporting diverse file formats (CSV, XML, JSON).
- Innovated data download features, supporting batch and incremental downloads across various formats.
- Utilized Federated engine for seamless primary and secondary database synchronization, covering incremental updates and complete backups.
- Achieved a 30% reduction in storage use and enhanced database synchronization, significantly boosting data processing efficiency.

Multithreaded & OOD Approach with C++: Boosting Assembly Line Efficiency
The source code is available on GitHub at AssemblyLineStimulation.

- Designed and implemented an Assembly Line Analysis Package using Object-Oriented Design (OOD) and C++ multithreading to facilitate the rapid design and testing of new assembly line strategies for factories.
- Developed a built-in statistical analysis module that automatically generates statistical data (max, min, mode, mean, and standard deviation) upon the completion of the simulation to compare the effectiveness of different strategies.
- Utilized the package to significantly improve the efficiency of a forklift manufacturer's assembly line strategy by 25 % compared to the original approach.

Microsoft SQL & Rigorous Database Design: Revolutionizing Recruitment Efficiency with RecruitPro
The source code is available on GitHub at RecruitPro.

- Ensured data integrity and consistency by adhering to strict database design principles, normalizing up to 3rd Normal Form, and implementing triggers and transactions for atomic operations.
- Customized to meet the specific needs of the recruitment process, a comprehensive set of functions, stored procedures, and views were designed to enhance the operational efficiency of the recruitment personnel.