

Hang LI

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Educational Background

University of Queensland (Australia)

07/2019-Present

- Pursuing Master of Science in Computer Science

University of Minnesota, Twin-Cities (United States)

08/2012-05/2016

- Bachelor of Science in Computer Science; (Software Engineer & Database Management) (Top 25% in Major)
- Winner of Global Excellence Scholarship for four consecutive years (2012-2016).

Paper

[1] Hang LI¹, Comparison of DFS and Backtracking DFS, *Digital User*, ISSN 1009-084, November, 2017. (Wan Fang Data included).

Certificates & Skills

- Proficient in development language like Java, Nodejs (Koa, Express), Javascript(es6, es7), HTML5, CSS, Typescript, C++, Python, Go, Swift, etc.;
- Well acquainted with XML and Schema standards;
- Experienced in Java development; familiar with development of MySQL, NoSQL, MongoDB, etc.; familiar with relational and non-relational databases;
- Familiar with RESTful APIs, JSON and OOP.
- Proficient in GIT versioning, VSC, Eclipse, etc.;
- Good at programming with MVC mode; skilled in factory and core factory, Adapter and so on;
- Capable of demand survey, demand analysis, module design, system design, and module development.

Work Experience

Henan She Chuan Technology Co., Ltd. (Zhengzhou, China)

07/2018-07/2019

Position: Tech Lead

- Responsible for system architecture design, writing technical documents, design project development plan;
- Responsible for code review, enforce coding style, maintain system's productivity;
- Conduct technical meetings with development teams, guide project development directions.

Guangzhou Lu Wei Lin Design and Decoration Company(Guangzhou, China)

03/2018 – 07/2018

Position: Backend Software Developer

- Responsible for back-end architecture design, writing technical documents, interface documents, designing background interfaces, developing and testing, and completing interface tuning;
- Responsible for the migration and updating of old interfaces, and the design of new interfaces and the improvement of old projects according to old projects;
- Responsible for the design and construction of part of the database;
- Responsible for exploring the deficiencies and limitations of the existing system and making suggestions for improvement;
- Responsible for developing and maintaining software code to meet system design, system requirements and technical requirements;
- Responsible for making proposals for the design and direction of new projects, and evaluating the cost of new projects.

Shenzhen Dianmao Technology Group (Shenzhen, China)

06/2017 – 03/2018

Position: Backend Software Developer

- Take charge of backend refactoring for the company's game projects, including writing development documentations, designing backend interface for games, refactoring and optimizing database;
- Lead a team to analyze business logic demands, conduct data analysis for the business model, refactor and rebuild business modules (such as Student Information Management System and Tower of Babel—a web game), offer support for business optimization;
- Analyze server data, including page view, purchase volume and repurchase rate, to offer data reference for system development.

First Capital Fund Management CO., LTD (Shenzhen, China)

08/2016 –06/2017

Position: IT Manager

- Built backend server and firewall, formulated overall optimization plan for the company network;
- Took charge of homepage code refactoring and subpage optimization, developed H5 and WeChat terminals, optimized frontend experience and response speed of webpage;
- Designed backend interface based on page module, fetched data from backend database;
- Introduced OA system, completed secondary development (connecting integrated office equipment like video conference), carried out routine maintenance;
- Assisted Investment Department and Development Department in writing and monitoring the quality of quantitative trading software by using Java and CTP APIs, fetched real-time futures and stock transaction data;
- Purchased Aliyun, made necessary configurations, built a cloud server;

The Velocity Tech Solutions Inc. (Roseville, America)

02/2016 – 07/2016

Position: Software Developer

- Reconstructed and optimized company website, developed multifunctional features within the store web page;
- Participated in demand analysis of the company's Internet finance projects, drafted technical files, developed core modules, ran unit tests, designed and developed subpage and product display page of the company website;
- Drafted software design plans according to product requirements, completed backend system architecture and database design;
- Designed and developed company App for Android users with Java, responsible for QA in the final stage;
- Fixed data transaction problems and improved user experience by designing a new function to save visitors' server configuration requirements, and increased monthly profit by 5%+.

Project Experience

Comparison of Depth-First-Search and Backtracking Depth-First-Search

10/2015-01/2016

Abstract: This project aimed to compare two search algorithms, Depth-First-Search (DFS) and Backtracking Depth-First-Search (BFS) by using three Sudoku Solvers. (Undergraduate Dissertation)

- Conducted hypothesis and theoretical analysis;
- Carried out experiment to test the efficiency of the three algorithms with all codes written in Python 3.4;
- Collected and analyzed data;
- Wrote a paper and concluded that BFS is better than DFS in solving Sudoku Puzzles regarding time and space.

Quantitative Trading Platform Construction

11/2016-02/2017

Abstract: This project aimed to build a quantitative trading platform to fetch real-time futures and stock transaction data and cater to the needs of high-frequency transactions.

- Surveyed major platforms, chose VNPY as the third-party interface, analyzed files and logic;
- Looked into the requirements of Investment Department;
- Designed modules, wrote interface documents, determined data format;

- Developed, debugged, launched and maintained the platform;
- Successfully adopted multithreading, socket technique of Java into program.

Code Cat (APP Game)

06/2017-Present

Abstract: This game is intended as a fun online platform that offers online programming teaching for children aged 6-16 in China. Through various programming courses, students can learn to use graphical programming languages on the platform to create games, software, animations, stories, etc., thereby laying a sound foundation for STEAM subjects. The game got ¥20 millions of A-series financing and ¥15 millions of B-series financing in December 2016.

Position: Backend Software Developer (responsible for backend development)

- Developed a new backend interface, moved and reconstructed the old one;
- Completed backend refactoring of the whole project;

“Tower of Babel” Project

06/2017-Present

Abstract: Tower of Babel is a web game that aims to make it more fun for kids to learn programming. By writing codes and answering questions, players can climb the tower, bring up elves and join team fighting in the game.

- Determined function modules based on demand analysis;
- Drafted requirement documents for backend development, wrote and checked codes;
- Used agile development pattern to develop game modules and functions;
- Debugged, launched, maintain and update the game.

Student Information Management System

08/2017- Present

Abstract: For internal use only, this system serves as the backend management platform for the purpose of managing student information, booking, giving and arranging classes.

- Debugged and optimized the modules of course booking and course arrangement;
- Packed third-party platform interface, added SMS and e-mail service;
- Developed, launched, debugged and maintain the system.

Backend Authorization System

Abstract: For internal use only, this system controls the backend module authorizations, determine users' privilege when user logged in, display/enable corresponding modules for the users, hide/disable the unauthorized modules.

- Using MySQL and MongoDB to store users' profile;
- Successfully developed middleware to control the API route;
- Using transaction/promise all to make sure the DB operations execute in parallel;
- Designed, developed, launched, and maintained the system all by myself.

Activities & Awards

- Member of Association for Computing Machinery 05/2013- 05/2014
- Academic Excellence Scholarship Winner for four consecutive years (UMN) 2012-2016
- 2D Game Design by Java, including Role Play Game, Floppy Bird Game Replica 01/2015- 05/2015
- Online pop quiz webpage design with html5+CSS+JS for student pre-class checking 10/2014- 01/2015
- Photo Gallery Website Design with HTML, JavaScript, CSS, MySQL and python CGI module 10/2015
- JS Script design: injected designed script into browser page to achieve automatic scalping and purchasing
- Module Design of the Project Tiger for the backend reconstruction and development of Student Information Management System and Tower of Babel 06/2017- Present