

HANG LI

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EDUCATIONAL BACKGROUND

University of Queensland, Brisbane, Australia Pursuing Master of Science in Computer Science Awarded for <i>Dean's Commendation for Academic Excellence</i> in 2019	<i>07/2019 - Present</i> Overall GPA: 6.7/7
University of Minnesota Twin-Cities, Minneapolis, United States Bachelor of Science in Computer Science Winner of <i>Global Excellence Scholarship</i> for four consecutive years from 2012 - 2016	<i>08/2012 - 05/2016</i> Overall GPA: 2.7/4

EMPLOYMENT HISTORY

The University of Queensland IELab (Brisbane, Australia) <i>Summer Research Scholar</i>	November 2019 - Present
<ul style="list-style-type: none">· I am currently conducting research under the supervision of Dr. Guido Zuccon in the field of information retrieval field. I am specifically focusing on search query refining, collaborating with PhD student Harrisen Scells;· I developed a series of tools and modules based on previous research for the literature search process of the creation of systematic reviews, I made significant contributions towards the research project;· I participated in regular discussion with supervisor collaborator Harrisen Scells and I provided viable solutions to research obstacles, as well as refactored partial codebase;· I gathered relevant literature, performed literature review, designed and implemented the experiments, analysed experiment outcomes. With identified findings, I detailed these in two research papers titled "<i>MeSH Query Term Suggestions in Literature Search for Systematic Reviews</i>" and "<i>Systematic Review Automation Tools for End-to-End Query Formulation</i>" which have been submitted to ACM SIGIR 2020 (ERAA*).	
Henan She Chuan Technology Co., Ltd. (Zhengzhou, China) <i>Full Stack Developer Lead</i>	July 2018 - July 2019
<ul style="list-style-type: none">· I was responsible for developing server side APIs to provide all kinds of services on the front end;· I participated in developing front end web pages and UI design;· I designed the database structure for MySQL, Redis, and MongoDB databases;· I examined relevant research papers in the area of communication middlewares to developed the middleware to achieve a high performance and scalable communication between server and the databases layer of the application, so as in high speed internet environment;· I developed an authentication system for internal use only, and I integrated it with a third-party Office Assistant system.	
LuWeiLin Decoration and Design Engineering (Guangzhou, China) <i>Software Developer and Backend Software Developer</i>	March 2018 - July 2018
<ul style="list-style-type: none">· I independently refactored the entire backend of the company system;· I decoupled the codebase based on its functionalities, achieving a higher level of code reuse;· I conducted research on online visualisations methods to build an online home decoration visualisation platform;· I developed several modules to improve user experience, including a basic search engine to allow users to search for desired home decoration plans.	
Shenzhen Dianmao Technology Group (Shenzhen, China) <i>Backend Developer</i>	June 2017 - March 2018

- I independently developed the entire backend v1.0 of an online web game called Tower of Babel; this game is still available online;
- I independently developed a user management system for internal use only, to manage employees authorizations for accessing the company data and front interfaces;
- I developed a chatbot for the customer service department. I researched different methods and adopted the fuzzy search method to develop a search engine for the knowledge base. I also designed a graph database to store relevant knowledge and the relationship in between;
- I partially refactored the backend codebase, reducing the code coupling;
- I developed the entire backend APIs of a mobile game app called Code Cat, refactored the old database structures and designed new database schemes to speed up data access.

First Capital Fund Management Co., Ltd (Shenzhen, China)

August 2016 - June 2017

Full Stack Developer

- I developed the front end web pages of the company, along with the entire backend of the companys system;
- I researched on high performance computing methods to implement a quantity trading platform which supports high computing demands with the investment department, in charge of developing the server side services and server configurations;
- I participated in developing the Office Assistant system; I developed an internal chat software in Python and integrated it into the OA system.

The Velocity Tech Solutions Inc. (Minnesota, United States)

February 2016 - July 2016

Software Developer

- I refactored and optimized the company's website, and I developed multifunctional features within the store web page;
- I participated in demand analysis of the companys Internet finance projects, drafted technical files, developed core modules, ran unit tests, designed and developed subpage and product display pages for the company's website;
- I drafted software design plans according to product requirements, participated in backend system architecture and database structure design;
- I participated in designing and developing the company App; I was in charge of Quality Assurance during the testing phase.

RESEARCH PUBLICATIONS

Li, H. (2017). Comparison of DFS and Backtracking DFS. *Digital User* 23(41), 269-273. doi:10.3969/j.issn.1009-0843.2017.41.248

Li, H., Scells, H. and Zuccon, G. (2020). MeSH Query Term Suggestions in Literature Search for Systematic Reviews. In *The 43rd International ACM SIGIR Conference on Research and Development in Information Retrieval*. [Submitted, Under Review]

Li, H., Scells, H. and Zuccon, G. (2020). Systematic Review Automation Tools for End-to-End Query Formulation. In *The 43rd International ACM SIGIR Conference on Research and Development in Information Retrieval*. [Submitted, Under Review]

ACADEMIC REFEREES

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