Zi Wang

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Summary

With solid grasp of object-oriented programming, algorithms, data structures, system design, as well as good front-end/back-end experience and outstanding troubleshooting skills, I am seeking a position as a **software engineer**.

Technical Skills

Programming Languages	Java, Python, JavaScript, SQL, Shell Script, MATLAB, HTML, CSS
Framework/Tools	React.js, Angular.js, Docker, Jenkins, Amazon AWS, Spring & Spring Boot, Maven, Junit, Selenium, Redis, Node.js, Express, jQuery, Git, MyBatis, Hibernate, MySQL, MongoDB.
Data Science	Experience with Machine Learning algorithms (Logistic Regression, KNN, PCA, etc.)

Programming Experience

Shop Management & Customers Rewards System (Spring Boot, Angular, Hibernate, Spring Boot, MySQL, Redis)
· Full-stack e-commerce web application using **Angular.js** as front-end and **Spring Boot** as back-End.
· Develop a Spring Boot back-end using **RESTAPIs** and **MySQL** database, and enabled different functionalities for online shopping operations (product browsing and searching, add to cart, checkout, check order history, etc.)
· Developed discrete **microservices** to maintain different components (shops, customers, sales, rewards, etc.).
· Used **Redis** for data caching, constructed master-slave configuration to balance the workloads.
· Enabled periodical analysis and visualization of shop activities, including product sales and customer activity.

Restaurant health condition rating & review website (JavaScript, HTML, CSS, Node.js, Express, MongoDB)
· Developed a web application for users to review and report restaurants' health conditions and COVID-19 outbreaks.
· Built the application with **Node.js**, **Express**, **MongoDB**, wrote **RESTful** APIs to handle HTTP requests, and deployed to Heroku.
· Implemented a notification system to monitor health condition violations and COVID-19 outbreaks in restaurants and notify nearby users.

Pay-per-use survey sending and collecting application (*JavaScript, React, Redux, MongoDB, Materialize*)
· Built a survey management web application allowing users to send customized surveying emails.
· Constructed the front-end with **React** framework and stored/modified state data with **React-Redux**.
· Enabled **OAuth** for user authentication and handled data persistence of user credits and info in **MongoDB**.

Professional Experience

Research Engineer	Dec 2018 – Present
Sheeta Global Technology Corp	Los Angeles, CA

Machine-learning assisted chromatograph analysis of petroleum mixtures:
· Develop and maintain a chromatograph analysis software to analyze petroleum mixture in the oil fields. Provide service and technical support to major oil drilling companies in United States, Brazil, China and Argentina.
· Conducted rapid and accurate analysis of oil mixtures originated from multiple sources. Used **machine learning** techniques to train the model and predict the contributions of each oil source in oil mixtures with **99%** accuracy.

Research Scientist	Jan 2017 – Dec 2018
Power Environmental energy Research Institute(Formerly PEER Center at Caltech)	Los Angeles, CA

Education

M.S. in Computer Science		Georgia Institute of Technology	2021-Present
Ph.D., Chemical Engineering	(GPA: 3.9/4.0, 10 Papers, 500+ citations)	Louisiana State University	2012-2016
B.S. in Chemical Engineering	(GPA: 3.5/4.0)	Tianjin University	2008-2012