Zhikang(Melo) Feng

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EDUCATION

McMaster University Sep 2021 – Aug 2023 (expected)
Master of Engineering in Computing and Software (Co-op) with GPA 3.8/4.0 *Hamilton, Ontario, Canada*

Northwestern Polytechnical University Sep 2016 – Jun 2020
Bachelor of Engineering in Computer Science and Technology with GPA 3.7/4.0 *Xi'an, Shaanxi, China*

SKILLS

Languages	Java, Python, C/C++, JavaScript, HTML/CSS, Bash
Database	SQL, NoSQL, MySQL, SQLite, PostgreSQL, MongoDB
Knowledge	OOP/OOD, CI/CD, RESTful API, UML, JSON, XML, JWT, DOM
Frameworks	React.js, Redux, Node.js, Express.js, Spring Boot, Spring Cloud, Django, Bootstrap
Tools&Platforms	Git, SVN, NPM, Maven, Gradle, Postman, Docker, GitHub, GitLab, Firebase, Heroku
	AWS EC2, AWS S3, Google GKE, Linux

EXPERIENCE

Algorithm Research Assistant Oct 2021 – Present
Data Science Lab, McMaster University *Hamilton, Ontario, Canada*
- Developed a parallel graph data mining system with AWS EC2, which is **65%** faster than the sequential version
- Proposed a graph partition algorithm to process graph data with **7.4M** edges when keeping dynamic balance
- Implemented a coordinator module to repair edges and integrate results, controlling missing rate under **3%**
- Co-authored a conference paper for **ICDE 2023** (The IEEE International Conference on Data Engineering)

Software Developer Intern Jul 2019 – Sep 2019
Xi'an R&D Center, Huawei Technologies Co., Ltd *Xi'an, Shaanxi, China*
- Created an auto-query feature to OWS to facilitate engineers requesting data, accelerated **70%** for each query
- Dockerized **30+** services of OWS, managed update and version control of Docker images via Dockerfile and SVN
- Assisted DevOps engineers to create and maintain CI/CD pipeline to replace manual way of build-deployment by Kubernetes and Jenkins, resulting in **5X** reduction of average deployment time
- Wrote a detailed documentation of **20+** pages about environment installation and setup for a team of **16** people

PROJECTS

Full-Stack Shopping Website: JoyStop GitHub Link 2022
- Built a scalable online shopping platform with **React.js** as the front-end and **Django** as the back-end, hosted the database on **AWS Postgres** and deployed the application to **Heroku**
- Achieved the centralized state management and application of middlewares by using **Redux**
- Implemented extensive **RESTful APIs** to handle http requests and responses and tested APIs by **Postman**
- Ensured high security of register, login, authentication and payment by Integrating **JWT** and **PayPal API**

Back-End Currency-related Microservices GitHub Link 2021
- Utilized **Spring Boot** to design **RESTful** web services on social entities, and microservices for currency exchange and currency conversion with **Spring Cloud**
- Connected microservices to **H2** in-memory database through **JPA**, set repositories to response to microservices
- Centralized the configuration of microservices with **Spring Cloud Config Server** hosted in local git repository
- Setup **Eureka Naming Server** as registry center and **Feign Client** to simplify invocation between microservices

Full-Stack Social Application: TalentHere GitHub Link 2021
- Developed a social network website allowing users to perform basic **CRUD** operations on posts and profiles with support from **RESTful APIs**, and deployed the project on **Heroku**
- Built the client-side views and actions with **React.js** and **Redux**, leveraged **Bootstrap** to style web pages
- Constructed the server-side services and an extensive API of the application with **Node.js** and **Express.js**
- Integrated **MongoDB Atlas** into the application as the data storage via **mongoose.js**