Haozhe Wang

✈ haozhe.wang.chn@outlook.com | ☎ 437-985-1894 | ⓞ haozhe0302 | ⓘ haozhewang

EDUCATION

University of Toronto   Sep 2021 - Apr 2023
Master of Engineering in Electrical and Computer Engineering | GPA 3.82   Toronto, Canada
Courses: Cloud Computing, Databases, Algorithms, Data Structures, Computer Security, Distributed Systems, Machine Learning

University of Wisconsin - Madison   Jan 2019 - May 2019
Visiting Student in Electrical and Computer Engineering | GPA 4.00   Madison, United States
Courses: Computer Engineering, Electrical Engineering, Embedded System, Circuits, Power Electronics

Northeastern University   Aug 2017 - Jun 2021
Bachelor of Engineering in Electrical Engineering | GPA 3.42   Shenyang, China
Courses: Embedded System, Computer Architecture, Control Theory, Control System, Computer Networking, Computer Security

TECHNICAL SKILLS

Languages: Java, Python, SQL, C#, C, HTML/CSS, JavaScript
Frameworks: Spring, Flask, MySQL, Bootstrap, React, PostgreSQL, Tensorflow, Pytorch, Hadoop, Spark
Tools: Git, Linux, AWS, Azure, VS Code, IntelliJ IDEA, Pycharm, VS, Anaconda
Certificates: AWS Certified Cloud Practitioner

EXPERIENCE

Baowu Steel Group Corp   Jul 2019 - Aug 2019
Software Engineer Intern   Nanjing, China

- Developed the web application to enhance user experience using **HTML**/**CSS** and transformed the website backend systems to optimize stability and security using **Java**/**Spring Boot**.
- Engineered remote industrial facility operations and maintenance models to forecast equipment fault by leveraging industrial process sensor data and **Tensorflow**.
- Quality assured the industrial cloud data management system thoroughly to obtain errors and administered fixes to improve the overall system performance.

PROJECTS

Shopme E-Commerce App | Java, Spring, Bootstrap, React, RESTful API, MySQL, AWS

- Utilized **Spring** to build an online shopping application, that provides a login system, product management, order tracking, customer reviews and checkout confirmation functionalities.
- Created interactive and user-friendly web pages using **Bootstrap** and **jQuery**.
- Designed and deployed responsive and scalable applications to AWS using EC2, RDS and S3.

Mini Pinterest Web | Python, Flask, Bootstrap, MySQL, AWS

- Constructed a full stack web application that allows users to browse, upload, save, delete, search by names and share images using **Flask**.
- Implemented **Memory-Caching** on server to speed up image fetching, allowed administrators to monitor the server status and switch cache replacement policies.
- Built an **Auto-Scaler** component to automatically resize the memory cache pool based on the configurations set by administrators to reduce server resource consumption.
- Designed flexible, scalable and reliable applications and deployed to AWS EC2, RDS, S3 and CloudWatch.

Stock Investment Portfolio Management Web | Python, Flask, AWS Serverless

- Utilized **Flask** to build an application allowing users to browse stock quotes, manage personal investments and calculate real-time benefits online by synchronizing with Nasdaq stock market APIs.
- Implemented a completely serverless architecture by using AWS **Lambda**, **DynamoDB**, **API Gateway** and **S3**.

Credit Card Reward Points System | Java, Spring, Bootstrap

- Developed a rewards calculation system that calculates the total monthly reward points earned based on the customer's credit card purchases at various merchants.
- Designed multiple methods to save 90% of the time and memory consumption in dynamic programming that enables calculation of monthly purchase history beyond $10k level.