XIAOYAN HUA

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EDUCATION

Tufts University, Medford, MA *Sep 2021 - Jun 2023*
Master of Science in Software System Development
Core courses: Software Engineering, Machine Learning, Security

North China Electric Power University, China *Sep 2011 - Jun 2015*
Bachelor of Engineering in Electrical Engineering and Automation
Award: National Scholarship

TECHNICAL SKILLS

Programming Language:	Java, C/C++, Python, Matlab, HTML, CSS, JavaScript, SQL, LaTeX
Framework :	Spring Boot, Spring MVC, React, Express, AJAX, Django
Technology:	MySQL, MongoDB,Bootstrap, Maven, Postman, Wireshark, AWS

PROJECTS

Travel Review Website (JavaScript, CSS, HTML) *Oct 2021 - Dec 2021*
- Created a website where people view and share travel experiences and pictures of different tourist spots.
- Applied **React** and **Bootstrap** to create a dynamic HTML webpage in the front end.
- Introduced **Express** to start up an application server, match requests to a particular router, and craft response.
- Implemented data storing and processing through the database of **MongoDB** combined with **Node.js**.

Job Seeking Crawler (Java) *Sep 2021 - Oct 2021*
- Achieved crawling and parsing job recruiting information related to computer science on a recruitment website.
- Built a web crawler with Jsoup based on the **Maven** environment and **Spring Boot** framework.
- Stored results with **MySQL** and **Navicat** including company, payment, job requirement, and publishing time.
- Attained deduplication function with Bloom Filter model to reduce duplicate data.

Client Chat Application (C) *Sep 2021 - Oct 2021*
- Designed a chat application based on the client-server model as an open-end project for lesson Network.
- Applied the **Select()** system call instead of threads to handle multiple clients synchronously.
- Handled both conversations between peer-to-peer and broadcasting among multiple clients.
- Established an error-handling routine to process multiple clients and errors or unexpected behaviors.

Electricity Device Anomaly Detection (Matlab) *Jan 2020 - Jun 2020*
- Found out abnormal electricity devices based on data of electricity acquisition system instead of on-site inspection.
- Developed a Fuzzy Algorithm based on line loss rate, power-consuming characters, and time series.
- Established a **Convolutional Neural Network** to learn the failure probability with high precision and recall.
- Filtered out 121 abnormal cases and achieved 97% accuracy when applied in practical use for 6 months.

WORK EXPERIENCE

State Grid Corporation of China, China *Aug 2015 - June 2021*
Electrical Engineer (full-time)
- Maintained the normal operation of field equipment including electrical data acquisition terminals and electric energy meters, monitored the quality of data acquisition for electric energy, analyzed data abnormalities.
- Accomplished the project Electricity Device Anomaly Detection as a leader with four members and reduced the on-site workload of power consumption inspectors.
- Participated in the testing group of developing the company's mobile application *State Grid Online* for three months.