

EDUCATION

•University of Washington

09/2024-PRESENT

Master in Electrical Engineering; GPA: 3.83/4.0

Seattle, WA

•Yangzhou University

09/2016-06/2020

Bachelor of Engineering in Software Engineering; GPA: 3.7/4.0

Jiangsu, China

PERSONAL PROJECTS

•Battery Data Standardization

02/2025-PRESENT

A cloud-based multimodal data ingestion platform for time series, cycling, and open-circuit battery data

Capstone

- Developed backend data processing pipelines using the Pandas library to standardize battery data from different sources, including column name mapping, unit conversion, and handling missing data
- Implemented a battery state classification algorithm to detect charging, discharging, and idle states in cycling datasets
- Built a client-facing web portal with React, supporting administrator, client, company, project, and dataset management functionalities

•Her Map

04/2024-01/2025

A map-based platform to help women locate female-friendly businesses and service providers

- Developed backend features including Tag, Category, Member, and Post Management, integrating them seamlessly with the front-end
- Processed structured location data from files and used a map API to convert addresses into longitude and latitude for accurate map display
- Build customer-facing front-end components using Vue.js and JavaScript

•Examination Master

11/2023-06/2024

A web app to extract, assemble, and export exam questions from scanned papers

- Conducted a survey to assess the need for an app designed to streamline the process of recording wrong questions
- Designed and developed a WeChat Mini program using SpringBoot, Vue.js, and Uniapp platforms for students to manage their wrong questions and improve learning outcomes. Additionally, developed a back-end management system for administrators to oversee users and question data
- Utilized OpenCV integration to automate question-splitting processes from test papers according to regular expressions and used iText to generate PDFs with selected questions, enhancing question management efficiency

•Campus Running Clocking Program

11/2018-03/2019

A mini program for users to check in at a designated location within a specified time

- Utilized GaoDe Map's open API to assist teachers in delimiting an area with regular and irregular shapes
- Designed an algorithm that calculates if a user is within the area based on latitude and longitude stored in the database
- Developed various functions with Java, including login, check-in procedures, tasks uploading, display of the designated area's scope, etc.

WORK EXPERIENCE

•City Chinese Medicine Hospital

05/2021-05/2023

Information technician

- Resolved malfunctions in hospital networks, computers, printers, and other electronic equipment
- Managed the implementation of new projects, including installation, commissioning, training, and collecting feedback from doctors and made suggestions to implementation engineers
- Created a Python-based model to streamline patient data processing, replacing inefficient Excel workflows with automated code inputs for statistical reports.
- Developed scripts to extract and analyze data from charts and tables, significantly enhancing productivity.
- Solved problems when using the HIS(Hospital Information System), LIS (Laboratory Information System), etc.

•Mind PointEye(Yangzhou) Co.,Ltd

09/2019-01/2020

Java Software Development Intern

- Analyzed video data from cameras to help count pedestrians, processed numerous data about the quantities of people and pushed it to the front-end for display
- Researched and built a back-end management system for YinMing Robot which is primarily used for classroom check-ins based on SpringBoot framework, Docker, MySQL as required
- Conducted code reviews for other team members and suggested areas for refactoring or improvement

ACADEMIC PROJECTS

•Design and Development of English Word Memory App Based on Android

01/2020-05/2020

Memorize English words using the Ebbinghaus Memory Curve

- Designed an algorithm that calculates the optimal review times for each word based on the Ebbinghaus memory curve, with the added capability to adjust these times according to user feedback for a personalized learning experience
- Implemented a reminder system that notifies the user when it's time to review a specific word based on the calculated offset from its previous presentation
- Wielded SpringBoot framework and Android platform, combined with MySQL; realized the functions of English word learning and reviewing, PK, vocabulary testing, word book changing, etc.

TECHNICAL SKILLS

Programming: Java, C/C++, Python, Linux, SQL, Vue, JavaScript, TypeScript, CSS, HTML

Techniques: Git, Redis, Docker, MySQL, Spring, SpringBoot, Flask