

Liangshe Li
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EDUCATION

Northeastern University, Boston, MA

Master of Science in Computer Science

Sep 2023 – Expected May 2025

GPA:3.7

Coursework: Database Systems Management, Algorithms, Data Management and Processing, Programming Design Paradigm

Northeastern University, Boston, MA

Master of Science in Electrical & Computer Engineering

Sep 2020 - May 2023

GPA:3.9

Coursework: Fundamentals of Computer Engineering, Data Visualization, Machine Learning and Pattern Recognition, Specific Topic: Advanced in Deep Learning, Specific Topic: Network Programming, Computer Architecture, Wireless Network & Internet of Things, Wireless Communication Systems

TECHNICAL SKILLS

Programming Languages Familiar: Python, Java (Collection, JVM, garbage collector, multithreading, etc.)

Grasp: C, C++, JavaScript, TypeScript, MATLAB, SQL, HTML5, CSS, Kotlin

Frameworks & Tools NodeJS, ReactJS, Spring boot, Angular, Git, Jira, Wiki, Wireshark, Qt Creator, Firebase

Databases MySQL, MongoDB

Operating Systems Windows, Ubuntu, CentOS, macOS

PROFESSIONAL EXPERIENCE

AI Speech Co., Ltd, Jiangsu, China

Jun 2021 - Nov 2021

Full Stack Software Engineer

- Designed an UI interface using **Qt Creator** (C++) to help workers more easily test the quality of new produced microphones.
- Updated and upgraded some functions of an original test program and pushed the codes to the company **Git**.
- Encapsulated codes of how to calculate the average sound frequency of a wav file to a static library using **visual studio** and uploaded the library to **Jira** for future use.
- Refreshed codes of a previous program of recording sound and supplemented a user manual for the program on **Wiki**.
- Designed a UI interface using Qt (C++) on **CentOS** to help technicians operate and train a **ML model** more efficiently. Set a timer and the program would begin to train the ML model automatically at a specific time in one day. Add a logger to the test model program so that technicians can supervise the situation of training.

Shanghai PartnerX Robotics Co., Ltd, Shanghai, China

Jul 2020 – Dec 2020

Software Engineer

- Applied **Express** and **MongoDB** to create a full-stack JavaScript application for users to review all robots.
- Created dynamic HTML with templating in EJS and imported Bootstrap CSS styles to design the web pages.
- Configured web pages and implemented **CRUD** operations (through requests) by defining **RESTful** routes.
- Introduced **middleware** to manage the request-response cycle and call the next middleware function in the stack.
- Defined custom error classes to deal with approximately **50%** async errors and mongoose errors.
- Set **HTTP Cookies** in the web application to store some information of users and make HTTP more 50% stateful.

ACADEMIC PROJECTS

Shopping Website using Spring Boot and Angular

Jul 2023 – Aug 2023

- Developed a full stack shopping web application using **Spring Boot**, **Angular** and **MySQL**.
- Generated cart-details, cart-status, checkout, login, login-status, members-page, order-history, product-category-menu, product-details, product-list and search components to realize customer login, browse, search, checkout and membership functions with **dynamic HTML pages** using **Angular frontend framework**.
- Generated cart, checkout, form, order-history and product service to deal with data extracted from **Spring Boot backend framework**. Used “**magic functions**” to perform creating, reading, updating and deleting (**CRUD**) operations through Spring Data repositories.
- Integrated **Okta authorization server** into login and logout service, which can improve 80% safety factor. Designed protected routes and applied Angular **route guards** to prevent users from accessing a part of the app without authorization.
- Used **Stripe** service to simplify Payment Card Industry Data Security Standard (**PCI DSS**). The shopping website would never send credit card data to our own server or store credit card data on our memory or database.

Cinema Application using AWS services

May 2023 - Jun 2023

- Created a cinema web application using **React.js** and pushed the codes to **GitHub**.
- Introduced the GitHub project to **CircleCI** and fetched develop branch locally.
- Set up AWS services using **Terraform** and integrated Terraform into CircleCI pipeline.
- Navigated AWS management console, added **AWS CloudFront** for storing and distribution on **AWS S3 stage**.
- Integrated GitHub with CircleCI and created, merged eight feature branches to manage the code configuration.