

Yuting (Kyra) Lu

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EDUCATION

NORTHEASTERN UNIVERSITY

Master of Science in Computer Science

Seattle, US
09/2023 – 06/2025(Expected)

SHANGHAI UNIVERSITY

Bachelor of Engineering in Automation

Shanghai, China
09/2019 – 06/2023

- **Coursework:** Circuits, Programmable Logic Controllers, Machine Learning and Neural Networks, Computer Networking, Digital Graphics Process, Data Structure & Algorithms

Skills

- **Programming Languages:** Java, JavaScript, HTML/CSS, SQL, Python, C/C++ , TypeScript, C#, MATLAB
- **Frameworks:** Spring Boot, React, Hibernate, Node.js, Angular, Vue, JUnit, Tensorflow, Flask, Django
- **Tools:** Git, Docker, AWS, Maven, MongoDB, MySQL, Postman, npm, Ubuntu, Linux, Shell

INTERNSHIPS

ABB(China), Ltd

Engineer Intern

Shanghai, China
07/2022 – 12/2022

- Formulated and implemented an automatic testing program using **C#**, minimized redundant manual thermal testing sub-steps
- Achieved real-time temperature monitoring for robotic movement using **Python** to analyze data, reducing manual operations
- Ensured efficient data management across multiple tables by conducting comprehensive data storage and analysis through the utilization of **SQL scripts** on a **MySQL** database containing more than 1000 rows

Shanghai Bright Power Semiconductor Co., Ltd

Electronic Intern

Shanghai, China
08/2021 – 09/2021

- Designed and compared different testing circuits to ensure better performance of the chips

PROJECT EXPERIENCE

MEAN based Fullstack Trello clone

- Utilized **Angular** and **TypeScript** to build a user-friendly client-side application
- Employed **Node.js** in conjunction with **Express** to develop backend, and leveraged **MongoDB** as the database solution for storing and managing project data
- Managed data flow and application state with **NgRx** middleware, reducers, and observable-based state management
- Implemented real-time notification and updates using **WebSocket** functionality through **Socket.IO**

Student Learning Management Platform

- Architected the Student Learning Management Platform, leveraging **Spring Boot**, **Spring MVC**, **JPA**, **Hibernate**, and **MySQL** to establish **RESTful APIs**
- Designed and developed a responsive and user-friendly frontend using **React.js**, enhancing the educational experience
- Implemented user registration, complete with email verification capabilities, ensuring security and user privacy, and making use of **Spring Security** to safeguard sensitive data
- Deployed the system on **Google Cloud** servers for scalable and reliable performance

Large-Scale Short-Term Taxi Demand Prediction in NYC

Research Advisor: Dr. Mike Ma

Shanghai, China
11/2022 – 02/2023

- Aimed at exploring and predicting short-term taxi demand at multiple time-ahead intervals using taxi trip data in New York City
- Implementing three regression models to make predictions and compare the final results with **Python**

Recommendation System based on Steam games

Research Advisor: Dr. Giorgos Mamakoukas

Shanghai, China
02/2022 – 07/2022

- Managed to use singular value decomposition method with **Python** to deal with the huge dataset of players and developed a new way of generating ratings to deal with the existed playtime, achieved a global recall of 35%
- Tuned relevant parameters, delivered a more than 10% recall improvement and became more precise in recommendation

Chinese Character Style Transfer with Conditional GAN

Research Advisor: Dr. Piotr Świerczyński

Shanghai, China
01/2022 – 06/2022

- Applied conditional generated adversarial network into transferring the original style of a Chinese font to the other characters
- Added two kinds of losses to optimize the training, obtained a better result
- Implemented U-Net to replace the traditional encoder-decoder network, minimized the information loss through the network