

# LUXIA YIN

San Diego, CA 92129

☎ 646-309-1600 ✉ luxiy2@illinois.edu 🌐 github.com/luxiy

## Technical Skills

---

**Languages:** Python, C++/C, Java, Javascript, HTML/CSS, SQL

**Frameworks/Tools:** AWS, Docker, Flask, Node.js, React.js, MySQL, PostgreSQL, MongoDB, Git/Github, SpringBoot

**Certification:** AWS Certified Cloud Practitioner

## Experience

---

### Full Stack Developer Intern

02/2024 – 08/2024

*Global Resource Technology Development Inc*

*Bronx, NY*

Developed and enhanced a math learning system aimed at improving students' proficiency through daily 15-minute exercises. (mathzoos.com) | *Python, Flask, React.js, PostgreSQL, AWS*

- Engineered a solution generator and template system using Python and Markdown, delivering detailed solutions and explanations for each math question, enhancing learning effectiveness.
- Integrated the frontend with the backend for uploading math solutions using React.js, Axios, and PostgreSQL, enabling dynamic solution retrieval and display.
- Designed and executed unit tests for the solution generator and template system in Python, ensuring the accuracy and correctness of the generated math solutions.
- Developed the multi-language version of Mathzoos by utilizing OpenAI API to automate the translation of math question solutions into multiple languages and integrating the translations into the PostgreSQL database.
- Introduced and implemented a daily summary feature using React and RESTful APIs built with Flask, enabling users to track their study progress, and enhancing overall engagement and learning retention on the platform.
- Managed version control with GitLab and GitHub, ensuring seamless collaboration and code versioning.

## Projects

---

### Where to Go Application | *Java, kotlin*

- Developed a comparison application using Android Studio, merging functionalities from popular apps to reduce user search time during travel or outings by providing weather condition comparisons for cities.
- Designed and implemented a user-friendly interface with features including user signup/login, favorite cities management, and customizable comparison settings.
- Integrated real-time weather updates for selected cities and interactive maps using the Google Maps SDK, enhancing the application's utility, and providing valuable information to users on-the-go.

### Heart Failure Readmission Prediction | *Python, CNN, NLP, Kaggle*

- Utilized Natural Language Processing (NLP) deep learning techniques to design a Convolutional Neural Networks (CNN) model for predicting heart failure hospital readmission from clinical notes, leading to a 8.2% improvement in predictive accuracy over traditional machine learning models.
- Optimized CNN model performance using hyper-parameter tuning, resulting in more accurate predictions.
- Developed a chi-square based feature analysis to automatically retrieve key features/ words from clinical notes, providing valuable clinical insights into patterns in readmission vs. non-readmission cases.

### Shortest Distance Chatbot | *Python, Javascript, AWS, Go*

- Designed and implemented a backend REST API using AWS API Gateway and Lambda to collect data on possible routes between two cities, storing the data in the DynamoDB database.
- Developed an AWS Lex chatbot capable of identifying two cities from user text and providing the shortest route between them, leveraging the route data stored in the DynamoDB database.
- Deployed the Lex Chatbot to make it publicly accessible, ensuring ease of use.

## Education

---

### University of Illinois at Urbana-Champaign, Champaign, IL

01/2022 – 12/2024

*Master of Computer Science*

*GPA: 4.0/4.0*

### Blinn College, Brenham, TX

05/2020 – 08/2021

*Courses in Computer Science*

*GPA: 4.0/4.0*

### SUNY College of Environmental Science and Forestry, Syracuse, NY

05/2015

*Bachelor of Landscape Architecture*

*Graduated Cum Laude*