

Jianglong Yu

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EDUCATION

Texas A&M University (GPA: 4.0/4.0)
Master of Science in Computer Science

Aug 2023 - May 2025
College Station, TX

Oregon State University (GPA: 3.7/4.0)
Bachelor of Science in Computer Science

Sep 2019 - Jun 2023
Corvallis, OR

PROJECTS

Apartment Rental Management System

Fall 2023

Key Technologies: *Microservices, Redis, MongoDB, Java Swing, Java*

- Led a two-member team to develop a Java cross-platform apartment rental management system.
- Implemented microservices with HTTP communication to improve system scalability and reliability. Utilized Redis and MongoDB for efficient data storage and retrieval.
- Developed the web interface using JavaScript and desktop application using Java Swing.
- Collaborated in an Agile environment, using Git for version control.

Android Travel App

Winter 2022

Key Technologies: *Kotlin, Android Studio, Figma, HTTP, SQLite, Git*

- Led a team of four in developing an intuitive travel Android app using Kotlin. Utilized Figma to create clear UI/UX outlines, facilitating streamlined development and collaboration among team members.
- Implemented HTTP for data integration from external APIs.
- Implement activity lifecycle methods and the ViewModel architecture to ensure that UI-related data is handled elegantly through lifecycle events.
- Enabling geolocation features and using SQLite for user settings storage enhanced the user experience.

Drawn Digit Identification

Fall 2022

Key Technologies: *Deep Learning, Feedforward Neural Networks, Cross-Entropy Loss*

- Developed a feedforward neural network with backpropagation for handwritten digit recognition, employing cross-entropy loss for multi-class classification.
- Optimized parameters including step size, epochs, and activation functions, achieving a 96% accuracy rate in a Kaggle competition.

Cloud-Based Student Management System API

Spring 2021

Key Technologies: *Node.js, MongoDB, JWT, Docker, API Development*

- Developed a comprehensive student management system API using Node.js and MongoDB, enabling CRUD operations on student, teacher, and assignment data.
- Enhanced system accessibility with paginated API endpoints.
- Ensured secure user authentication and authorization using a JWT-based scheme.
- Containerized the entire system with Docker, encompassing database, caching, and processing pipelines.

RESEARCH

Research Assistant, Development of a Supply Chain Model

Oct 2022-Jun 2023

Mentor: Professor. Karthika Mohan

Corvallis, OR

Key Technologies: *Probability Programming, Supply Chain Forecasting, Data Analysis*

- Assisted in a professor-led research project, focused on developing a supply chain forecasting model for the automotive industry using probabilistic programming.
- Contributed to the prediction of car component production quantities using multiple probability distributions.
- This model improved manufacturing efficiency and reduced losses from excess inventory in component storage.

WORK EXPERIENCES

Teaching Assistant, Oregon State University

Jun 2022-Mar 2023

Web Development Course

Corvallis, OR

- Assisted in grading, reviewing assignments, and conducting FAQ sessions to enhance student understanding.
- Developed strong communication and pedagogical skills through interactive teaching.

PROFESSIONAL SKILLS

Languages: C/C++, Python, Java, JavaScript, Node.js

Technologies: MongoDB, Redis, Docker, Flask, Git, Deep Learning, VSCode, Figma, Blender, Agile Development, Problem Solving