# Jianglong Yu

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#### **EDUCATION**

**Oregon State University** Corvallis, OR

Sep.2019-Jun.2023 B.S. in Computer Science

Cumulative GPA: 3.68/4.00, Major GPA: 3.71/4.00

Concentration: Artificial Intelligence

**Texas A&M University** College Station, TX Enrollment Aug.2023 M.S in Computer Science

## PROFESSIONAL SKILLS

**Programming Language:** C/C++, Python, JavaScript, Node.js

Developer Tools: VSCode, Visual Studio, Android Studio

Libraries: Pandas, OpenCV, NumPy

Others: Git, REST APIs, Flask, MacOS, Linux

#### RESEARCH

GIS Tool - Safer-Ways Corvallis, OR

Senior Design, Mentor: Professor. Joseph Louis

Nov.2022-Jun.2023

- Developed Safer-Ways, an app for optimal route calculation while avoiding hazards.
- Created user-friendly interfaces using ArcGIS Pro and open-source routing software.
- Contributed to the project's backend and frontend using Flask framework and JS.
- Implemented functionality to avoid wildfires, floods, and degraded infrastructure.
- Designed complex route aggregation operations for evaluating evacuation points.

#### **Development a Supply Chain Model**

Mentor: Professor. Karthika Mohan

Corvallis, OR Oct.2022-Jun.2023

- Building a supply chain model using the Probabilistic Programming Languages (PPLs) in order to answer causal queries.
- Collect relevant data and generate values of different parameters in the supply chain using different probability distributions, and then answer the causal queries through the model.

### **PROJECTS**

Winter 2023 **Traveling APP** 

- Led a team of 4 to create a travel app for city information.
- Developed the app in Android Studio using Kotlin.
- Integrated Google Maps and Yelp APIs for data gathering.
- Implemented activity lifecycle, ViewModel architecture, and user settings page.
- Responsible for main page functionality and code merging using Git.

#### **Drawn Digit Identification (Small MNIST)**

- Fall 2022
- Implement a feed-forward neural network model for predicting the value of a drawn digit.
- Using Backpropagation for Feed-forward Neural Network.
- Use the ReLU as the active function and change some Hyperparmeter values to improve the accuracy.
- The accuracy of this classifier is 95%.

#### Sentiment Analysis based on Naive Bayes

Spring 2022

- Predicted the sentiment sentences taken from Yelp reviews to determine the writers' positive or negative attitudes toward the subject.
- Used Python to preprocess data by transforming each sentence into a feature vector plus a class label that could be readable by the Naive Bayes algorithm.
- Built a Naive Bayes classifier and trained the classifier so that it could read the training labels and learn the parameters used by the classifier.
- The accuracy of this classifier is 75%.

#### **Design of Student Management System**

Spring 2021

- Implemented a complete RESTful API for Tarpaulin app, which allowed users to review course contents, set up, correct, and submit assignments.
- Managed backend data with MongoDB and verified the users' qualification based on JWT standard.

#### TEACHING & VOLUNTEER EXPERIENCES

#### Teaching Assistant, Oregon State University

Jun.2022-Mar.2023

- Assisted the course instructor in grading and reviewing students' weekly assignments, quizzes, and course materials.
- Arranged FAQ sessions to tackle students' problems encountered in lectures and assignments.

Community Volunteer

Jul.2021-Aug.2021

• Provided community service to citizens in Xinxiang, a city that suffered from rainstorm, and arranged encouragement events.