Daniel Mao

(314) 898-8195|daniel7-d@hotmail.com

EDUCATION

Saint Louis University **St. Louis, MO**

Bachelor's Degree of Science in Computer Science (May 2023), **Cumulative GPA: *3.82/4.00***

Awards: Dean´s Scholarship, Dean´s List for five consecutive semesters

Relevant Coursework: Data Structures, Software Design, Algorithms, Computer Architecture, Operating Systems, Object-Oriented programming, Software engineering, Machine Learning, Web Technologies, Databases.

WORK EXPERIENCE

Spacelab

Machine Learning Engineer Intern 06/2022-08/2022

- Automated an ETL process, ML Model, and deployment of the predictions into a lookup table in a NoSQL database that can be consumed by a front-end application through an API (GraphQL).
- Improved a Convolutional Neural Network which would help to determine whether the image contains an exoplanet or not by binary classification with the common patterns that appears in the light curve functions.
- Managed to implement my model in AWS cloud computing microservices in order to scale the Project using Lamba functions and EC2 instances that would execute with automatic triggers.

Saint Louis University

Machine Learning Researcher *07/2021-Present*

- Researched the issues that Machine Learning has on the privacy of the data that is being used to train models by implementing attacks such as membership inference on Machine Learning models to determine by binary classification if a piece of data has been used to train the model or not.
- Preprocessed the datasets used in the research in order to fit it into the Machine Learning models and ran the models using CUDA.

PROJECT EXPERIENCES:

SIB (React) [https://github.com/oss-slu/Seeing-is-Believing]

08/2022-Present

- SIB is an open-source project that helps students to improve their accents on foreign languages through a website that can be monitored by instructors.
- Used Firestore to store our data which is a NoSQL database that is in the cloud in order to store the user information for the login and it is deployed in Heroku.

Emotion Detector (Python)

03/2022-05/2022

- Trained a program that can take images of people´s faces and predict their emotions based on their facial features using machine learning models using a dataset from Kaggle.
- Implemented two different models to train the program which are Linear Regression and Convolutional Neural Network where the tested accuracy has a 78% rate of success in the predictions.

2048 (Java)

02/2021-04/2021

- Designed an game app in a working team environment that was built on Gradle following software design principles such as inversion dependency principle or Liskov substitution principle.
- Implemented a MVC (model-control-view) design that allowed the team to have a more efficient error testing and divisible work frames.
- Communicated with the team and worked with Git repositories where I organize each piece of code according to our design and performed JUnit tests in our model.

SKILLS & INTERESTS

Programming languages: Java, C/C++, Python, R, JavaScript, CSS, HTML, React

Languages: English, Chinese (Mandarin), Spanish| Additional: TensorFlow, Keras, Bootstrap, PyTorch