DANIEL MAO

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SUMMARY

A skilled and motivated computer science professional with a strong interest in data structures, algorithms, and machine learning. With extensive experience in software design and development, the candidate has worked as a machine learning researcher and machine learning engineer intern. Also made valuable contributions to open-source projects, including a website designed to help students improve their foreign language accents. The candidate's proficiency in Python, Java, React.js, AWS, PyTorch, TensorFlow, and SQL, combined with a passion for delivering innovative solutions and driving results, has enabled them to develop a strong skill set that they are eager to apply in collaborative, meaningful projects. Actively seeking a challenging and dynamic role in the industry that will allow them to further refine their skills and make impactful contributions to the field.

EXPERIENCE

Saint Louis University
Machine Learning Researcher   *07/2021-Present*

- Investigated the impact of Machine Learning on data privacy by implementing membership inference attacks.
- Preprocessed datasets for ML model fit and used CUDA for model execution.
- Determined by binary classification if a piece of data was used in ML model training.

Spacelab
Machine Learning Engineer Intern   *06/2022-08/2022*

- Automated ETL process, ML model deployment into a NoSQL database with a GraphQL API.
- Improved Convolutional Neural Network for binary classification of exoplanet images.
- Implemented ML model in AWS cloud computing microservices with Lambda functions and EC2 instances for scalability and automation.

PROJECTS

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

- 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 relevant data.
- Assisted in assigning and resolving project tickets, contributing to the successful completion of project deliverables and ensuring timely resolution of technical issues.
- Implemented Continuous Deployment and Continuous Integration (CD/CI) processes in Heroku to ensure seamless and automated deployment of code changes to production.

Emotion Detector (Python)

- Trained a program that can take images of people ś faces and predict their emotions based on their facial features using machine learning models using a dataset from Kaggle (Website for Datasets).
- 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)

- Contributed to the development of a game app using Gradle and following software design principles.
- Implemented a MVC design for efficient error testing and divisible work frames
- Collaborated with team and used Git to organize code and perform JUnit tests in the mode

EDUCATION

Bachelor of Science in Computer Science
Saint Louis University
May 2023
St. Louis, MO
GPA: 3.81/4.00

ACADEMIC AWARDS

Dean's Scholarship
Dean's list for six consecutive semesters

RELEVANT COURSES

Data Structures
Algorithms
Software Design
Software Engineering
Machine Learning
Web Technologies
Databases
Operating systems
Computer Architecture

SKILLS

Python
JavaScript
HTML
CSS
C/C++
Java
React.js
AWS
Pytorch
Tensorflow
SQL
R

LANGUAGES

English
Spanish
Chinese (mandarin)