Sreevasan Sivasubramanian

McKinney, TX | s.sreevasan@gmail.com | 469-442-7999 | www.linkedin.com/in/ssivasubramanian05

EDUCATION

University of Texas at Dallas | B.S Computer Science

Richardson, TX | 08/2023 - Present

- Cumulative GPA: 3.9/4.0
- Coursework: Data Structures & Algorithms, Probability and Statistics for Computer Science, Discrete Mathematics I & II
- Organizations: Artificial Intelligence Society, Association of Computing Machinery

EXPERIENCE

Kumon Learning Center | Senior Teaching Assistant

Coppell, TX | **07/2022-08/2023**

- Tutored roughly 25 students per week in mathematics, reading analysis, and grammar resulting in a 20% increase in student performance on assignments and tests
- Proctored tests and wrote evaluations based on their results to determine if the student can proceed to the next level
- Communicated with parents on their student's performance and behavior to provide them insight into the impact of their learning through Kumon
- Assisted the center with learning preparation, grading student work, and setting up the classroom which decreased delays by 5-10 minutes

ACADEMIC PROJECTS

Flight-Planner | University of Texas at Dallas

Richardson, TX | 04/2024-04/2024

- Built a Flight-Planner program that provided viable flight paths given a start and a destination to understand graph algorithms
- Utilized Java to program a Depth-First Search algorithm implementation to form flight paths and return the top three paths in terms of either time or flight cost

Aerovista | UTD Association of Computing Machinery

Richardson, TX | **02/2024-04/2024**

- Researched techniques to optimize search and rescue vehicles for better object detection with a team led by a research lead
- Implemented a Mask R-CNN and RT-DETR mode using PyTorch to perform real-time object detection and trained the models using a SARD_YOLO dataset
- Tested using a DJI Drone connecting via the DJITello API and OpenCV; Resulted in a mAP score of 0.780 for RTM-DET and 0.480 for Mask R-CNN
- Presented these results to industry specialists at the bi-annual ACM Research Symposium, won ACM Research People's Choice Award

Circuitseer | UTD Artificial Intelligence Society

Richardson, TX | **07/2023-12/2023**

- Collaborated with a team of like-minded individuals to build a full stack application that solves simple circuit problems
- Utilized TensorFlow to implement a YOLOv5 computer vision model that detects specific components in each image of a circuit and utilizes the proper equation to solve the problem; Used React for the frontend and a Flask server for the backend
- Achieved an accuracy of 84% at an IoU of 0.5; Presented the application to a group of judges from the industry and received feedback along with potential areas of expansion for the application

SKILLS

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

Frameworks: React, Flask

Libraries: Pytorch, TensorFlow, OpenCV

ACHIEVEMENTS

- Dean's List Fall 2023
- AP Scholar with Distinction