Athulya Saravanakumar

832-487-3282 | Athulya.Saravana@gmail.com | Sugar Land, TX 77479
athulyas123.github.io/Athulyasworld/ | linkedin.com/in/athulyasaravanakumar

EDUCATION

Dulles High School: ***Math and Science Academy - Computer Science Endorsement*** *2019 - 2023*

Unweighted GPA: 3.74 and **Weighted GPA**: 4.33

AP/Honors Coursework: AP Computer Science A, Computer Science III Honors, AP Calculus BC, AP Physics I, AP Physics II, AP Statistics, AP Chemistry, AP Language and Composition etc.

Awards:

- FIRST Robotics National Dean's List Finalist (2021)
- FIRST Tech Challenge State Championship Inspiration Award(2021)
- Digital Divas Hackerank 2nd Place (2021)
- Academic Excellence Award from High school (2019-2022)

SKILLS

Technical: Advanced: Java, Python, AI/ML, Data Structures, JavaScript, HTML. Software: OpenCV and ROS
Languages: English, Spanish, and Tamil
Certifications: Inspirit AI(2021), Robotics Academy at UT Austin(2021), Texas A&M AI/Data Science Camp(2021), Coding For Medicine(2020), ID Tech Camp(2019)

WORK EXPERIENCE/PROJECTS

Codeverse, Naperville, IL: Rank 2 Programming Guide *May 2021 - Present*

- Programmed and debugged a game for the seasonal Codeverse Show Case event
- Resolved software and hardware issues for client and manager side
- Administered daily/weekly programming class for ages 5 - 15
- Initiated new methods and content of teaching curriculum
- Skills used: JavaScript, Object Oriented Programming, Game Design

Tesla Autonomous Driving - Object Detection *2021*

- Recreated Tesla's non-Lidar approach of object detection using Artificial Intelligence
- Went through many iterations to find 99% accuracy of detecting street objects while in motion
- Skills used: Neural Networks, Convolutional Neural Networks, Sliding Windows, Transfer Learning, YOLO AI Model, and OpenCV

PID Autonomous Robot - Robot Operating System *2021*

- Implemented own PID for a virtual robot in a simulation using line follower and push and pull method through calculus concepts: Proportion, Integration, and Derivatives to calculate error
- Skills used: programming language C and software like Gazebo for simulation

Research on Balanophora - Hemiparasitic Plants *2021 - Present*

- Comparing AT rich holoparasitic plants and their mutation rates to plants with more GC content
- Skills used: Biopython, MUSCLE, NCBI Blast, and Linux

LEADERSHIP

FIRST Dulles Robotics Club: Vice President and Programming Lead August 2019 - Present

- Organize competitions for Houston while teaching members to learn and apply Java to the robot
- Volunteering to empower the younger generation to enter and pursue a STEM field

National Coding For Medicine Club: Founder and President August 2020 - Present

- Leading scholarly research projects while teaching bioinformatics concepts like biopython, etc.