Aazim Hamza Anver

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EDUCATION

New York University - Abu Dhabi, UAE / Paris, France / New York, USA

2022 - 2026

Major - Computer Science, Minor - Engineering, GPA 3.74/4.00

Elizabeth Moir School - Colombo, Sri Lanka

2015 - 2022

Edexcel International High Achievers Award (3A*, 1A), Edexcel World Prize (O/L CS), SAT 1550

TECHNICAL SKILLS

Software Development

- Proficient in Python and C, C++, with experience in Lua, JS
- Experienced in use of Docker, remote platforms, Linux (shell), git, among others
- Developed with FreeRTOS, PlatformIO, STM32CubeIDE, ESP-IDF for embedded software development

Hardware Design & Manufacture

- Proficient with Fusion 360, On Shape & SimScale for design and simulation of hardware
- Experience collaborating with manufacturers & suppliers for production and assembly
- Experience in operation, maintenance and troubleshooting of 3D printers

Electronics Design

- Proficient with EasyEDA, KiCAD for PCB design
- Experience designing, manufacturing and assembling PCBs and electronic systems

PROJECTS / COMPETITIONS

SpacePort America Cup

July 2023

- Dr. Gil Moore Award for Innovation, runner-up out of 158 teams
- Design and manufacture of a high power hobbyist rocket, HaloShip
- Developed RoCat v1.1 flight computer, and early iterations of firmware
- Design and manufacture of a reusable and redundant hold down and release mechanism (HDRM) for stage separation, tested on HALOSHIP

NASA JPL University Crowdsourcing Initiative

Spring / Summer 2023

- Assessing the National Aeronautics and Space Agency's current hold down and release mechanisms
- Evaluating new designs for HDRMs with electric and mechanical redundancy for satellite applications
- Developing the manufacturing pipeline for potential designs

FIRST Global Robotics Olympiad

June 2019

- Represented Sri Lanka in FIRST Global Robotics Olympiad in 2017, 2018 and 2019
- Collaboratively designed, prototyped, programmed a robot to complete the given challenge
- Awarded Judges Technical Award, and 3rd Place out of 191 teams

EXPERIENCE

Intern - Sri Lanka Telecom Digital Lab

Summer 2024

- Developed synthetic image generation using Blender for training ML models on license plates
- Wrote firmware for interfacing with SIMCOM A76XX with ESP-IDF
- Wrote library for configuration web portal, persistent settings, OTA updates over HTTP with Arduino framework

Team Member - nyuad.space

Spring / Summer 2023

- Working on both the SpacePort America Cup and development of an HDRM for NASA JPL
- Part of the UAE SPACE Initiative, helping to advance the aerospace capabilities of the region

Equipment Specialist - SpaceBar NYUAD

Spring 2023

- Operate and maintain telescopes and astrophotography equipment as part of operations
- Collaborated with various departments for smooth operation of astronomical observation events

Self Run Business - 3D Printing

2021 - 2022

- Designed 3D models and manufactured them for various clients
- Designed part of electrocardiogram signal generators for use in government hospital personnel training