**Aryan Gupta**

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**EDUCATION**

University of North Carolina at Charlotte - Charlotte, NC

*M.S. in Computer Engineering Aug. 2020 – Dec. 2022 (Expected)*

*Current Cumulative GPA: 3.830 / 4.000*

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| *B.S. in Computer Engineering* | *Minor in Software Systems* | *Minor in Mathematics* | *Aug. 2016 – Dec. 2020* |

*Graduated Cum Laude* (*GPA: 3.573 / 4.000)*

**WORK EXPERIENCE**

Mosaic Computing / Personal Computer Support

*IT System Administrator II Aug. 2021 – Present*

* Develop and maintain computing environment to support academic and research labs in the college
* Development included specialized embedded/high performance computing solutions to support HIL simulation
* Provide support on the development of university-wide Linux-based services

*IT System Administrator I Feb. 2020 – Jul. 2021*

* Provide support to the Mosaic managed desktop computing environment
* Oversee helpdesk support tickets with Tier 3 support
* Package engineering applications for deployment on Mosaic Windows desktops

*Lead Technical Assistant Apr. 2018 – Jan. 2020*

* Managed TAs in work environment
* Conducted interviews for potential TAs and Lab Roamers

**RESEARCH AND PUBLICATIONS**

(TBD) Risk Aware LTL Motion Planning with Reinforcement Learned Agent and Antagonist

*Dr. Dipankar Maity, Ph.D. – University of North Carolina at Charlotte – Charlotte, NC*

**PROJECTS, RESEARH, AND CREATIVE ENDEAVORS**

NASA University Student Launch Initiative *2019 – 2020*

*First Place Nationally Payload, Second Place Nationally Overall*

* Designed, documented, and constructed a rocket (LV) with a quadcopter (UAS) payload
* Lead development of computer systems on UAS and LV
* Lead development of camera vision system to detect ice sample location from LV
* Assisted in design of UAS to retrieve a lunar ice simulant sample
* Assisted design of deployment system to eject UAS out of LV during decent

TensorFlow Banana Presence Detector on IoT Arduino board *Spring 2021*

* In a group, designed, trained, and tested a banana presence detector on a low powered Arduino ARM board
* Would detect presence of banana if placed in front of the camera
* Utilized Arduino Nano 33 BLE board with the OV7670 Camera

IoT Home Security System *Fall 2020*

* Develop Android app, Raspberry Pi, API Server, and IoT sensors to remotely control and secure a home
* All applications and server code developed from the ground up using Python, C++, Java, PHP, and SQL
* Embedded IoT sensors communicated via Wi-Fi to Raspberry Pi dashboard
* Raspberry Pi dashboard synced up with API Server
* Android app controlled the activation of sensors and break-in alarm

**SKILLS**

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| Leadership | Troubleshooting | Problem Solving | Communication | Reverse Engineering |

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| Computer Networking | Multithreading | Embedded Systems | Assembly | Software Systems |

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| C++ | Python | Linux | Ansible | Git | OpenCV | Arch Linux | ARM | Java |

**EXTRACURRICULAR**

Boy Scout, Boy Scout of America *2008 – 2021*

* Assistant Scoutmaster *Dec. 2019 – Apr. 2021*
* Eagle Scout *Feb. 2016*

IEEE Eta Kappa Nu (IEEE-HKN) Chapter Member *Apr. 2022 (Expected)*