

# Aryan Gupta

Charlotte, NC

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theguptaempire.net/about-me

## EDUCATION

transcripts available upon request

University of North Carolina at Charlotte - Charlotte, NC

M.S. in Computer Engineering

Aug. 2020 – May 2023 (Expected)

Current Cumulative GPA: 3.830 / 4.000

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

references available upon request

ENSCO Avionics, Inc.

Embedded Software Engineer II

Aug. 2022 – Present

- Design tests to verify functionality of the fuel inerting system on the Airbus A321-XLR aircraft
- Utilize HIL testing to verify ICU operation based on the DO-178C verification process

Mosaic Computing / Personal Computer Support

IT System Administrator II

Aug. 2021 – Jul. 2022

- 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

## RESEARCH AND PUBLICATIONS

links available upon request

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

(TBD)

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

## PROJECTS AND CREATIVE ENDEAVORS

code available on GitHub

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 in 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, Web 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 with Raspberry Pi dashboard and synced up with an API Server
- Android app controlled the activation of sensors and break-in alarm

## SKILLS

Leadership	Troubleshooting	Problem Solving	Communication	Reverse Engineering
Computer Networking	Multithreading	Embedded Systems	Assembly	Software Systems
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