# Aryan Gupta

Waxhaw, NC

agupta40@uncc.edu

980-666-0648

f theguptaempire.net/about-me

#### **EDUCATION**

University of North Carolina at Charlotte - Charlotte, NC

2016 - Dec. 2020 (Expected)

Bachelor of Science in Computer Engineering with Minor in Software Systems and Mathematics

GPA: 3.533 / 4.000 Chancellor's List: Fall 2016 Dean's List: Spring 2017, Fall 2017, Spring 2019

#### **WORK EXPERIENCE**

## Mosaic Computing / Personal Computer Support

System Administrator I

Feb. 2020 - Present

- Provided support to the Mosaic managed desktop computing environment
- Oversaw helpdesk support tickets with Tier 3 support
- Packaged engineering applications for deployment on Mosaic desktops

Lead Technical Assistant

Apr. 2018 - Jan. 2020

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

Hardware Technical Assistant

Summer 2019

- Assisted in managing compute servers used by College of Engineering faculty and students
- Troubleshot lab machines and computers for hardware issues
- Assisted other computing departments in various issues

Technical Assistant (TA)

Aug. 2016 - Apr. 2018

- Managed Mosaic computing environment and associated computers
- Assisted engineering students and faculty with computer related issues
- Managed redundant servers for software management and deployment

## PROJECTS, RESEARH, AND CREATIVE ENDEAVORS

NASA University Student Launch Initiative

2019 - Present

- 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

Arduino-based Flight Controller

Summer 2018

- Independently designed and constructed an Arduino-based quadcopter
- Implemented custom I<sup>2</sup>C library for Arduino Nano to double performance from Arduino libs
- Reverse engineered iBUS protocol to interface with Arduino Nano using logic analyzer

DC to AC Inverter Summer 2019

- Worked with a team to design and fabricate a DC to AC inverter
- Troubleshoot, debug, and resolved issues with custom PCB / circuit design

Home Lab Summer 2015 - Present

- Independently implemented a home lab with multiple Linux and Window servers
- Hosted server with HTTPS (Let's Encrypt® certificate), DHCP, DNS and self-designed protocols

# **SKILLS**

Leadership **Troubleshooting Problem Solving** Communication Reverse Engineering Computer Networking Multithreading **Embedded Systems** Assembly Arch Linux C++ Python ARM Git OpenCV STM32

#### **EXTRACURRICULAR**

Boy Scout, Boy Scout of America

**Assistant Scoutmaster** 

**Eagle Scout** 

Senior Patrol Leader

2008 - Present

Java

Dec. 2019 - Present

Feb. 2016

2015 Jul. 2018 – Present

49th Security Division

Linux

Aug. 2018 – Present

Aug. 2019 - Present

Institute of Electrical and Electronics Engineers

49er Rocketry and Projectile Society