Aryan Gupta

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theguptaempire.net/about-me

EDUCATION

University of North Carolina at Charlotte - Charlotte, NC

M.S. in Computer Engineering

GPA: 4.0 / 4.0 B.S. in Computer Engineering

Minor in Software Systems Minor in Mathematics

Aug. 2016 - Dec. 2020

Aug. 2020 – Dec. 2022 (Expected)

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

RESEARCH AND PUBLICATIONS

Grad Thesis: (TBD) Robotic Motion Planning, Pathfinding, and Linear Temporal Logic

TBD

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

• TBD

PROJECTS AND CREATIVE ENDEAVORS

NASA University Student Launch Initiative

2019 - 2020

National First Place Payload, National Second Place 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

Arduino-based Flight Controller

Summer 2018

- Independently designed and constructed an Arduino-based guadcopter
- Implemented custom I²C library for Arduino Nano to double performance from Arduino libs
- Reverse engineered iBUS protocol to interface with Arduino Nano using logic analyzer

Project Website

http://theguptaempire.net

- Host slew of projects done by me (or partly by me) on my website
- Includes home lab setup, Raspberry Pi smart clock, mechanical keyboard build, and more

SKILLS

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

EXTRACURRICULAR

Boy Scout, Boy Scout of America

Assistant Scoutmaster

Eagle Scout

49th Security Division

Senior Patrol Leader

2008 - Present

Dec. 2019 - Present

Feb. 2016 2015

Jul. 2018 - Present

Aug. 2019 - Present

49er Rocketry and Projectile Society