**Aryan Gupta**

 Charlotte, NC  hire-me@gempi.re  980-666-0648 **** theguptaempire.net/about-me

**EDUCATION**

University of North Carolina at Charlotte - Charlotte, NC

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

*GPA: 4.0 / 4.0*

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

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

Ardrey Kell High School - Charlotte, NC *Aug. 2013 – Jun. 2016*

*GPA Weighted: 4.625 – GPA Unweighted: 3.5313 / 4.0000*

*Class Rank: 96 of 670*

Providence Senior High School - Charlotte, NC *Aug. 2012 – Jun. 2013*

**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 (Part Time: 17-20 hr./week) Apr. 2018 – Jan. 2020*

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

*Hardware Technical Assistant (Part Time: 20 hr./week) Summer 2019*

* Assisted in managing servers used by Engineering College
* Troubleshot machines for hardware issues
* Assisted other departments in issues

*Technical Assistant (TA) (Part Time: 17-20 hr./week) 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

Best Brains Tutoring

*Grader (Part Time: 4-8 hr./week) 2015 – 2016*

* Graded work completed by students

**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 quadcopter
* 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 |

|  |  |  |  |
| --- | --- | --- | --- |
| Computer Networking | Multithreading | Embedded Systems | Assembly |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| C++ | Python | Linux | ARM | Git | OpenCV | Arch Linux | STM32 | Java |

**EXTRACURRICULAR**

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

* Assistant Scoutmaster *Dec. 2019 – Present*
* Eagle Scout *Feb. 2016*
* Senior Patrol Leader *2015*

49th Security Division *Jul. 2018 – Present*

49er Rocketry and Projectile Society *Aug. 2019 – Present*