

EDUCATION:

University of North Carolina at Charlotte - Charlotte, NC

2016 – Present

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

GPA: 3.558 / 4.000

WORK EXPERIENCE:

Mosaic Computing / Personal Computer Support

Lead Technical Assistant (Lead TA)

Apr. 2018 – Present

- Managed other TAs in work environment
- Conducted interviews for potential TAs

Hardware Technical Assistant Internship

Summer 2019

- Assisted in managing servers used by College of Engineering
- Troubleshoot machines for hardware issues
- Assisted other 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 issues
- Managed redundant servers for software management and deployment

Best Brains Tutoring

Grader

2015 – 2016

- Graded work completed by students

PROJECTS, RESEARCH, AND CREATIVE ENDEAVORS:

NASA University Student Launch Initiative (Senior Design)

2019 – 2020

- Constructed a rocket with a UAV payload
- Lead design and implementation of Camera Vision to detect drop location from rocket
- Assisted in design of UAV quadcopter to carry drilling mechanism to drop site

Arduino-based Flight controller (Personal Project)

Summer 2018

- Independently designed and constructed an Arduino-based quadcopter.
- Self-taught details on PWM, Serial, I2C, and PID.
- Designed custom I2C library for Arduino Nano to double performance from Arduino libs
- Reverse engineer iBUS protocol to interface with Arduino Nano using logic analyzer

DC to AC Inverter (Junior Design)

Summer 2019

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

Home Lab

Summer 2015 – Present

- Independently implemented a home lab with multiple Linux and Window servers.
- Host webserver with Let's Encrypt® certificate, DHCP, DNS, and other custom server protocols

SKILLS:

On a scale of 0 (beginner) to 10 (expert).

C++ 9

Python 6

Linux 7

ARM 5

ACTIVITIES AND LEADERSHIP:

Windows Insider, Microsoft	2015 – Present
• Beta tested Windows 10, Windows Server 2016 and Office 2016 in a virtual machine and as a primary OS	
Boy Scout, Boy Scout of America	2008 – 2017, 2019 – Present
• Assistant Scout Master, Dec. 2019 – Present	
• Senior Patrol Leader, 2015	
• Junior Assistant Scoutmaster, 2017	
• Philmont Trek Leader, 2014	
• Assistant Patrol Leader (Warlord Patrol), 2013 – 2014	
• Assistant Patrol Leader (Pedro Patrol), 2016	
• Quartermaster, 2012 – 2014	
Technology Student Association (TSA)	2014 – 2016
• Member, 2014 - 2016	
• TSA Officer (Webmaster), 2015	
Orchestra	2004 – 2016
• Orchestra, 2004 – 2012	
• Symphonic Orchestra, 2013 – 2015	
• Chamber Orchestra, 2015 – 2016	
Chorus	2003 – 2014, 2016
• Chorus, 2003 – 2012	
• Concert Chorus, 2012 – 2014	
• Men's Chamber, 2016	
National Honor Society	2015 – 2016
National Science Honor Society	2015 – 2016
National Technical Honor Society	2016
National Society of High School Scholars	2014 – 2016

HONORS AND AWARDS:

- Emergency Management Instructional Training, 2013
 - Completed the Emergency Management Instructional Training offered by FEMA
- NJROTC (Marine Corps Navy Junior Reserve Officers Training Corps)
 - Cadet Private First Class Rank, 2012
 - Cadet Lance Corporal Rank, 2012
 - Cadet Corporal Rank, 2013
- YLT Top Gun, 2013
 - Completed the week-long National Youth Leadership Training offered by Boy Scouts of America.
- Technology Student Association (TSA) Competitions
 - Regionals 3rd Place in 3D CAD, 2015
 - Regionals 1st Place in Biotechnology, 2016
 - Regionals 1st Place in Webmasters, 2016
 - Regionals 2nd Place in 3D CAD, 2016
 - States 1st Place in Webmasters, 2016
 - States 3rd Place in Biotechnology, 2016

- States 3rd Place in 3D CAD, 2016
- Nationals 5th Place in Biotechnology, 2016
- Nationals 5th Place in Webmasters, 2016

TSA Webmasters, 2015

- Created and maintained the TSA Website

Owner of The Gupta Empire

- Maintains personal server under theguptaempire.net domain

Boy Scouts of America

- Firem'n Chit, 2014
- Totin' Chip, 2014
- Merit Badges
 - Search and Rescue, 2012
 - Personal Fitness, 2013
 - Indian Lore, 2013
 - Wilderness Survival, 2013
 - Swimming, 2013
 - Insect Study, 2013
 - First Aid, 2013
 - Camping, 2013
 - Lifesaving, 2014
 - Citizenship in the Nation, 2014
 - Citizenship in the World, 2014
 - Finger Printing, 2014
 - Orienteering, 2014
 - Archery, 2014
 - Weather, 2014
 - Digital Technology, 2015
 - Rifle Shooting, 2015
 - Environmental Science, 2015
 - Engineering, 2015
 - Electronics, 2016
 - Personal Management, 2016
 - Cooking, 2016
 - Citizenship in the Community, 2016
 - Communication, 2016
 - Family Life, 2016
- Ranks
 - Scout Rank, 2011
 - Tenderfoot Rank, 2012
 - Second Class Rank, 2013
 - First Class Rank, 2014
 - Star Scout Rank, 2014
 - Life Scout Rank, 2015
 - Eagle Scout Rank, 2016
- Order of the Arrow
 - Ordeal Member, 2014
 - Brotherhood Member, 2015

VOLUNTEER EXPERIENCE:

Second Harvest Food Bank (Feeding America), 2015

- Sorted food and other donated goods in to boxes
- Time: 2 hours each day for 2 weekends

Scouting for Food (Boy Scouts of America), 2012 – present

- Distributed food donation bags then collected them a week later
- Time: 5 hours for 2 days each year

Adopt-A-Stream Cleanup (Boy Scouts of America), 2012 – present

- cleaning up a local stream our troop has adopted
- Time: 4 hours one weekend each year

Luminaries/Love Lights (Pilot Club of Charlotte), 2010 – present

- Placed bags with names of people whose life has been impacted by Alzheimer's around a pond
- Time: 6 hours one weekend each year

Church Clean-up (Living Savior Lutheran Church), 2010 – present

- Cleaned up and mulched the grounds around our local church
- Time: 4 hours one weekend each year

Loaves and Fishes, 2013

- Sorted donated food in to boxes
- Time: 4 hours on a weekend

Toys for Tots (Marine Toys for Tots Foundation), 2013

- Sorted donated toys in to boxes for children
- Time: 5 hours for 2 days

Eagle Project (Boy Scouts of America), 2015

- constructing and painting wooden benches for our school tennis team
- Time: 5 hours for 5 weeks