Aryan Gupta

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EDUCATION

transcripts available upon request

University of North Carolina at Charlotte - Charlotte, NC

M.S. in Computer Engineering — *Aug. 2020 – May 2022 (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

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

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

PROJECTS, RESEARH, 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 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*