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Electrical Engineer Co-Op, Research Assistant for the advanced vehicular system, and 5G communication. Skilled in embedded system design, LabView, Python, Java, C++. Strong education professional with in-progress Bachelor's in Computer Engineering focused on Artificial Intelligence, Deep Learning, Neural Network, and Automation.

OBJECTIVE Secure a full-time job as an electrical and computer engineer.

EDUCATION

Bachelor's in Computer Engineering	Mississippi State University	Starkville, MS	12/2022	GPA 4.00
Associate in Science	El Centro College	Dallas, TX	05/2018	GPA 3.94

TECHNICAL SKILLS

- **Programming Language**
C/C++, Python, Java (Advanced Hibernate Framework, Derby Database, Apache TomCat), JavaScript, SQL, Android, Backendless, RESTful API
- **Hardware:**
Robot Operating Software (ROS), Embedded system design, 3D printing, 3D modeling in Solidworks, Arduino, Raspberry Pi, and other MCUs, OrCAD, Altium, Proteus, KiCAD, Quartus Prime, Vivado, LabView, Wireless Insite, PX4, Renesas's e² studio.

EXPERIENCE

WORK EXPERIENCES:

- ❖ Hunter Engineering Company-Raymond Electronics Plant Jan 2020-Present
 - **Electrical Engineer Co-Op:** Design functional test fixtures to test PCBs that are manufactured at the Plant. Develop an executable operator-friendly program in LabView that can communicate with Microcontrollers. Circuit design in KiCAD/Altium, and create the test fixtures in such a way that they are Aegis Factory-Logix capable. Worked on a project to create C/C++ code integrated with LabView for a database required by quality control.
- ❖ Mississippi State University
 - **Undergraduate Research Assistant:** Cooperated with researchers in Advanced Vehicular System, Enabling technologies such as Lidar's, radars, and low-cost cameras, as well as powerful graphical processing units (GPUs) and the explosion of deep neural networks (OpenCV, TensorFlow) to detect lanes on different roads. Worked on various machine learning and deep learning techniques for Sensor Fusion for camera and lidar mostly using SqueezeSeg and TensorFlow. Working with a team of researchers to develop a cell phone tracking system inside a prison by implementing AI methods to create triangulation to pinpoint the cell phone using machine learning and Software Defined Radios. Working with a team of researchers from 5 universities and *National Instruments* in 5G Communication System research (using drones) as a Certified Part 107 FAA Drone Pilot. Experimenting with srsLTE/RAN, OAI, and Amarisoft technologies to understand and build 5G and beyond networks.

PROJECTS:

- ❖ **Personal Projects** 2018 - Present
 - **Android Apps**
 - Created an app that keeps track of local videos that are watched completely. The app consumes Google Search API and YouTube API (1 million quotas). Created another app for real-time temperature monitoring system for old servers' using Google Firebase and real-time database.
 - **Robotics** 2018-2020
 - Built *Soda can catcher*, *Line follower robot*, *Self-balancing robot*, and *obstacles avoiding robot*.
 - **Miscellaneous** 2018-Present
 - Successfully created a program using Google *TensorFlow* and its components to detect *Dart Vader* character from Star Wars in any given picture.
 - Designed, simulated, and fabricated various embedded systems like drones, bench power Supply, and tire pressure monitoring system using microcontrollers and 315MHz receivers.
 - Conducted several seminars on topics like analog circuit design, Arduino, and Raspberry Pi.
- ❖ **Phi Theta Kappa Honor Society - Sigma Tau Chapter** May 2018
 - Developed two sections in *Blackboard* where students can see what events are happening on-campus and a list of organizations available on campus.

LEADERSHIP EXPERIENCE

- ❖ President Nepalese Student Association – NSA-MSSTATE 2021-Present
- ❖ Software Lead Xipiter UAS Integrated Products Team 2021-Present
- ❖ Vice President Phi Theta Kappa-Sigma Tau Chapter, VP Records El Centro College 2018

AWARDS ACCOMPLISHMENT

- Recipient of Certificate of Excellence in the course Microprocessor ECE 3424 at Mississippi State University. 2021
- Recipient of Funding for Undergraduate Research Program for Deep Learning technique for autonomous vehicles. 2020
- Recipient of a 2020-2021 Mississippi Automotive Manufacturers Association Scholarship. 2020
- First runner-up of robotic competition – Dallas Personal Robotics Group. 2018