

Electrical Engineer Co-Op, Undergraduate Research Assistant for the advanced vehicular system, and 5G communication. Strong education professional with in-progress Bachelor's in Computer Engineering focused on Artificial Intelligence, Deep Learning, and Automation.

**OBJECTIVE** Seeking full-time position in any fields related with Embedded System Design, Radio Frontends, and Autonomous systems.

## 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

- **Software:**  
Robot Operating Software (ROS), C++, Python, Java (Advanced Hibernate Framework, Derby Database, Apache TomCat), JavaScript, HTML, MySQL, Android Studio, Backendless, RESTful API, PHP.
- **Hardware:**  
Analog PCB design, 3D printing, 3D modeling in Solidworks, Arduino, Raspberry Pi, and MCU. Experienced in Proteus, Altium, KiCad, Quartus, Lab View, Wireless Insite, Pixhawk PX4, Ardupilot, SDRs, srsLTE and Amarisoft 5G System.

## EXPERIENCE

- **WORK EXPERIENCES:**
  - ❖ Mississippi State University
    - **Undergraduate Research Assistant:** 1. Cooperated with researchers in Advanced Vehicular System, Aug 2019-present  
Enabling technologies such as LiDARs, 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. 2. NIJ project: Currently, 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. **Co-authored on four** papers published in SPIE digital library. 3. AERPAAW project: Working with a team of researcher from 5 universities and *National Instruments* in 5G Communication System research (using drones) as a Certified Part 107 FAA Drone Pilot. Has exposed to various SDRs such as B210, X310 and N310, and worked with srsLTE, Amarisoft 5G callbox and GNU Radio.
  - ❖ Hunter Engineering Company-Raymond Electronics Plant Jan 2020-May 2020
    - **Electrical Engineer Co-Op:** Develop an executable operator-friendly program in Lab View which can communicate with Arduino, Raspberry pi, and/or other MCU to control testing devices. Circuit design in KiCad/Altium, implementing the boards to create a prototype of a testing device for large scale manufacturing for testing "Hunter-product" circuit boards. Worked on a project to create C++ code integrated with Lab View for a database required by quality control.
  - ❖ El Centro College, Dallas, TX
    - **Supplemental Instructor and an Administrative Clerk:** College Level Chemistry-CHEM 1411 Sep 2017-Jul 2019  
and College level Math - MATH 1314 and an administrative clerk performing office work including note-taking to disabled students. "Happy to Help 2018 Award" award winner amongst the staff.
  - ❖ Merch by Amazon-Woot, Carrollton, TX
    - **Certified Quality Control:** Performed multiple tasks not limited to check the quality of products April-July 2019  
manufactured in the plant and shipping the product. Worked closely within the production site.
- **PROJECTS:**
  - ❖ Android App *Video Player Pro* - Personal Project Summer 2020
    - Created an android app which keeps track of Videos that are already watched completely. The app consumes Google Search API and YouTube API (10000K quotas). The app has built in PDF, PowerPoint reader which are added with the intention to keep users focused and engaged within the topic they are working on without having to change screen.
  - ❖ Dallas Personal Robotics club, Richardson, TX Feb 2018
    - **Built** "Soda can catcher", "Line follower robot", "Self-balancing robot" using various MCUs such as Arduino, Raspberry pi, PIC24, STM32. Successfully created a python-based AI program using Google TensorFlow and its components to detect *Dart Vader* character from Star Wars in any given picture. First runner up of robotic competition.
  - ❖ Phi Theta Kappa- Sigma Tau Chapter May 2018
    - **Honors in Action project:** Organized various campus events on Fridays to find the correlation between the retention rate of students as compared to not having any campus events on Fridays.
    - **College Project:** Developed two sections in Blackboard where students can see what events are happening on campus and list of organizations available on campus. May 2018
  - ❖ Association of Computer Machinery, Northwest Missouri State University, Maryville, MO Jan 2016
    - **Conducted several seminars** on topics like analog circuit design, Arduino, and Raspberry Pi. Researched and experimented on Scribbler 2.0 collaboratively with other Special Interest Groups.
    - **Participated in programming contest** in University of Missouri - St. Louis March 2016
- **LEADERSHIP EXPERIENCE**
  - ❖ Vice President Phi Theta Kappa-Sigma Tau Chapter, VP Records El Centro College 2018
  - ❖ Fellow Leader Men of Distinction MOD El Centro College 2017
  - ❖ President Association of Computer Machinery Special Interest Group robotics 2016  
Northwest Missouri State University

## AWARDS ACCOMPLISHMENT

- Recipient of Undergraduate Research Assistantship for Deep Learning technique for autonomous vehicles 2019-2021
- Recipient of a 2020-2021 Mississippi Automotive Manufactures Association Scholarship 2020