



GAVIN EPPERSON

201 Donaghey Ave. 

(501) 860-5125 

gavinscottepperson@gmail.com 

linkedin.com/in/gavin-epperson 



EDUCATION

B.S. Computer Engineering | University of Central Arkansas (UCA)

EXPECTED GRADUATION: MAY 2022

- GPA: 4.00
- Norbert O. Schedler Honors College
- Alpha Chi National Honor Society



EXPERIENCE

Undergraduate Research | UCA

MAR 2020 – CURRENT

- Researching evolvable machine learning to enable AI in embedded systems
- Implementing random decision forests onto Arduino Unos and investigating methods to improve time efficiency
- Solutions are written in C++ in the Arduino IDE
- Faculty mentor: Dr. Ahmad Patooghy

Intelligent Embedded Systems Research Assistant | UCA

OCT 2019 – CURRENT

- Research Assistant to Dr. Ahmad Patooghy of the Computer Science Department
- Programming a Raspberry Pi to read from piezo sensors and microphones while regularly taking pictures using multithreading in Python.

Personal Projects

SMART PEEPHOLE | AUG 2020 – CURRENT | RASPBERRY PI, COMPUTER VISION, PYTHON

- Convert a normal peephole into a Smart Peephole that saves outside video footage only when it detects movement
- Uses a Raspberry Pi 3 B+ with a Camera Module V2 and simple Python event detection
- Introduced me to real-time computer vision through the OpenCV 4 library.

LAUNDRY MONITOR SITE | MAR 2020 – CURRENT | SQL, C#, ANGULAR

- Creating a website where anyone in a dorm can see if washers or dryers are currently in use
- Microcontrollers send current sensor data to database via API that allows the front-end to access that data
- Familiarized me with IoT concepts, website and API building, and SQL database functionality
- Front-end is made with Angular 10, the API with ASP.NET Web API framework, and the database is Microsoft SQL Server.



SKILLS

- | | | |
|----------|-----------------|----------------|
| • C++ | • Visual Studio | • Raspberry Pi |
| • Python | • C# | • Arduino |
| • Java | • SQL | |



ACTIVITIES/AWARDS

Student Undergraduate Research Fund | Spring 2020 – Fall 2020

“Enabling Machine Learning in Arduino-Based Embedded Systems Using Data Preprocessing” Funding to research algorithm-based efficiency improvements to machine learning on embedded systems

UCA Computer Science Club – Treasurer (Fall 2019 – Fall 2020)
Vice President (Fall 2020 – Present)

UCA Cybersecurity Club – Member (Fall 2019 – Present)