



THE EDUCATORS
A Project of Beaconhouse

AI Robotics WINTER Teacher Training Workshop (January 1st & 2nd, 2026)





Objectives

Learn how to integrate AI and robotics **WITH SOFTWARE AND HARDWARE.**

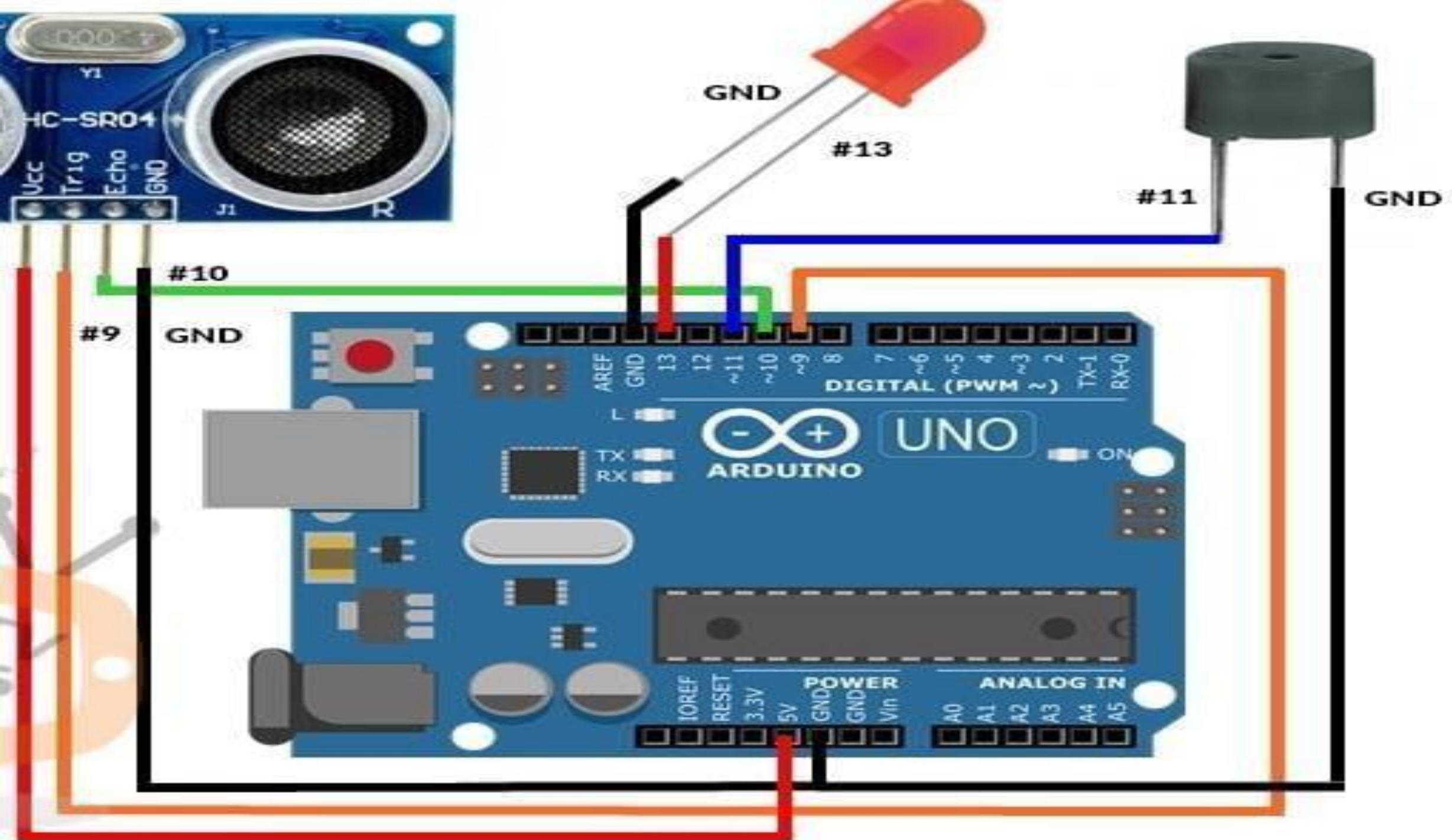
Gain hands-on experience with robotics hardware and software.

Develop coding skills **WITH THE HELP OF AI** for robotics applications.

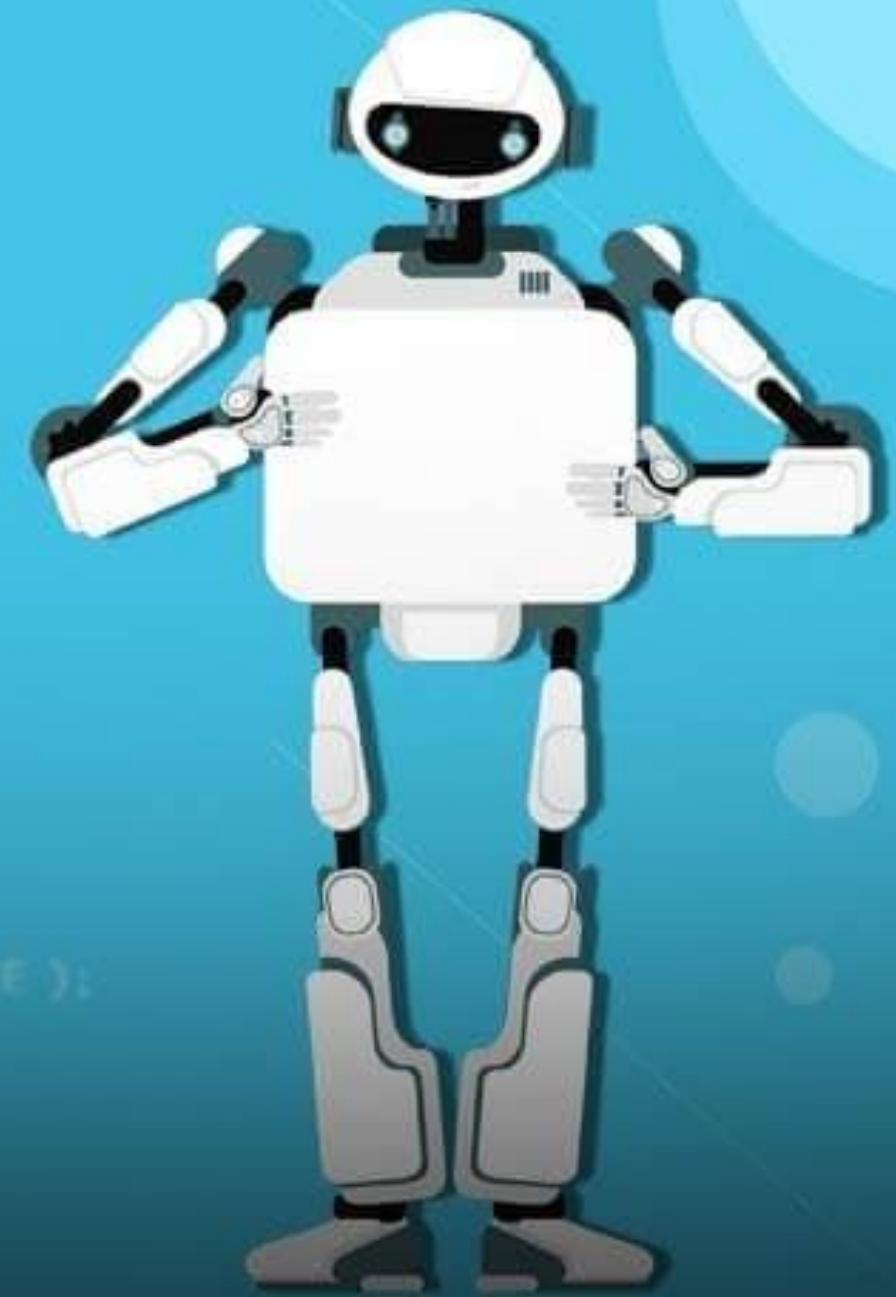
Explore circuit diagrams and electronic components relevant to robotics **PROJECT**.

Learn how to troubleshoot common robotics challenges.





```
var perc = 99.0, wmin = 1920, hmin = 1080, w, h, w1, h1, ratio;  
var FromDoc = open ( File ("D:\FromMacro.psd"));  
var IntoDoc = open ( File ("D:\IntoMacro.psd"));  
  
app.preferences.rulerUnits = Units.PIXELS;  
w = FromDoc.width.value;  
h = FromDoc.height.value;  
ratio = h/w;  
app.activeDocument = FromDoc;  
activeDocument.selection.selectAll();  
  
var shapes = [ [ [ { x1: 0, y1: 0, x2: 1000, y2: 1000 } ],  
[ { x1: 0, y1: 0, x2: 1000, y2: 1000 } ],  
[ { x1: 0, y1: 0, x2: 1000, y2: 1000 } ],  
[ { x1: 0, y1: 0, x2: 1000, y2: 1000 } ] ];  
  
app.activeDocument.selection.select ( shapes[0], SelectionType.REPLACE );  
app.activeDocument.selection.copy ();  
app.activeDocument = IntoDoc;  
activeDocument.activeLayer = activeDocument.layers[0];  
IntoDoc.paste ();  
  
activeDocument.layers[0].name = "Image 1";
```



How to Generate Coding for Robotics with AI ☐ ✨



```
role_id'
'resource_id'
);
if ( $this->rule_exists( $details['rule_id'] ) ) {
    if ( $access == false ) {
        // Remove the rule as it's no longer needed
        $details['access'] = false;
        $this->_sql->delete(
    } else {
        // Update the rule with the new access level
        $this->_sql->update(
    }
foreach( $this->rules as $rule ) {
    if ( $details['role_id'] == $rule['role_id'] ) {
        if ( $access == false ) {
            unset( $this->rules[ $rule['rule_id'] ] );
        } else {
            $this->rules[ $rule['rule_id'] ] = $details;
        }
    }
}
```

JET
learn



// made by SIR ANWAR AI ROBOTICS

```
const int trigPin = 9;const int echoPin = 10;const int buzzer = 11;const int ledPin = 13;// defines variables``long duration;int distance;int safetyDistance;void setup() {pinMode(trigPin, OUTPUT); // Sets the trigPin as an OutputpinMode(echoPin, INPUT); // Sets the echoPin as an InputpinMode(buzzer, OUTPUT);pinMode(ledPin, OUTPUT);Serial.begin(9600); // Starts the serial communication}void loop() {// Clears the trigPindigitalWrite(trigPin, LOW);delayMicroseconds(2); // Sets the trigPin on HIGH state for 10 micro secondsdigitalWrite(trigPin, HIGH);delayMicroseconds(10);digitalWrite(trigPin, LOW); // Reads the echoPin, returns the sound wave travel time in microsecondsduration = pulseIn(echoPin, HIGH); // Calculating the distancedistance= duration*0.034/2;safetyDistance = distance;if (safetyDistance <= 5){ digitalWrite(buzzer, HIGH); digitalWrite(ledPin, HIGH);}else{ digitalWrite(buzzer, LOW); digitalWrite(ledPin, LOW);} // Prints the distance on the Serial MonitorSerial.print("Distance: ");Serial.println(distance);}
```

THANK YOU

