

**Name – Parag Gattani**

Program No. – 13

Program Title – IR based SERVO Motor controller

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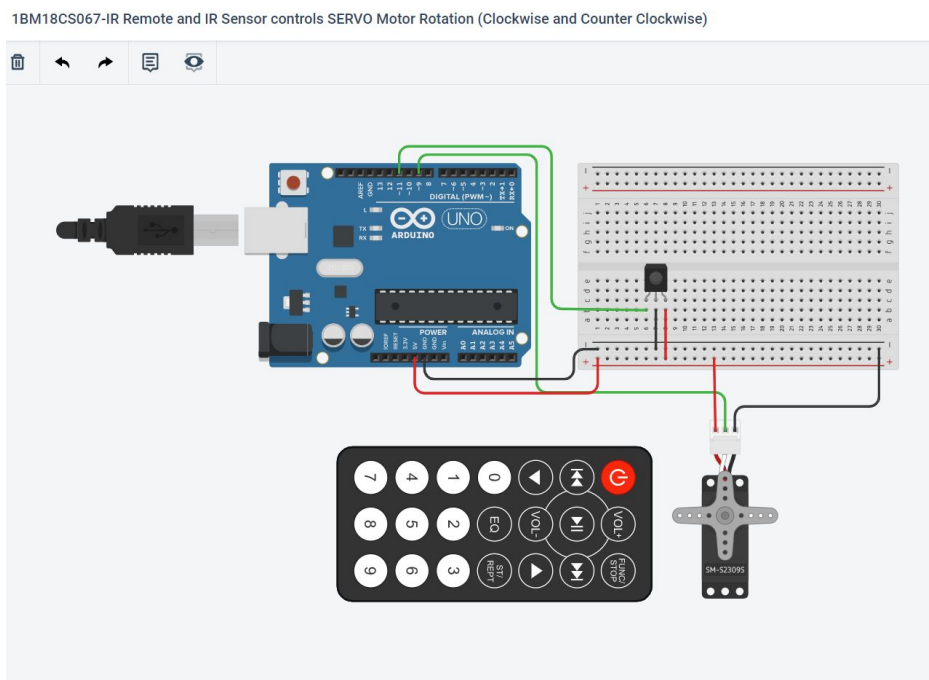
## AIM

Design IR based SERVO Motor controller. (Clockwise and CounterClockwise rotation of shaft).

## HARDWARES REQUIRED

- Arduino Board, Breadboard Small,
- IR Sensor, IR Remote, Micro Servo

## CIRCUIT DIAGRAM



## WRITE-UP

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28/10/2020

Exp. 13

IR based SERVO Motor Controller.

Aim.

Design IR based SERVO Motor Controller

Hardware Required:-

Arduino Board, Breadboard, Small, IR Sensor,  
IR Remote, MicroServo

Code:-

```
int RECV-PIN=11;  
IRrecv irrecv (RECV-PIN);  
decode_results results;
```

```
Servo myservo
```

```
void setup()  
{  
  Serial.begin(9600);  
  irrecv.enableIRIn();  
}
```

```
void loop()  
{  
  if (irrecv.decode(& results))  
  {  
    switch (results.value)  
    {  
      case 0x FDD0FF :  
        myservo.attach(9);  
        Serial.println("start");  
        break;
```

Case 0xFD69F:

```
my servo. write(360);  
Serial.println("clockwise");  
break;
```

Case 0xFD20DF:

```
my servo. write(-360);  
Serial.println("counter clockwise");  
break;
```

default:

```
Serial.println("Unrecognized code received: 0x");  
Serial.println(results.value, HEX);  
break;
```

}

```
servo.write();
```

}

}

## CODE

```
#include <Servo.h>

#include <IRremote.h>

int RECV_PIN = 11;

IRrecv irrecv(RECV_PIN);

decode_results results;

Servo myservo;

void setup(){
  Serial.begin(9600);
  irrecv.enableIRIn();
}

void loop(){
  if (irrecv.decode(&results))
  {
    switch (results.value)
```

```
{  
  case 0xFD00FF:  
    myservo.attach(9);  
    Serial.println("Start");  
    break;  
  case 0xFD609F:  
    myservo.write(360);  
    Serial.println("Clockwise");  
    break;  
  case 0xFD20DF:  
    myservo.write(-360);  
    Serial.println("Counter Clockwise");  
    break;  
  default:  
    Serial.print("Unrecognized code received: 0x");  
    Serial.println(results.value, HEX);  
    break;  
}  
irrcv.resume();  
}  
}
```

## **OUTPUT**

Designed a Smart Package handling system using Tilt Sensor and LED.