



# Rover MEGA PROJECT

## RoboTech

- **PWM from Raspberry:** Implementation and control of Pulse Width Modulation (PWM) signals using a Raspberry Pi for precise motor control.
- **Switching Circuit:** Design and analysis of an efficient switching circuit to manage high-power loads.
- **DC:** Exploration of DC motor characteristics and performance under various operating conditions.
- **IMU:** Integration of an Inertial Measurement Unit (IMU) for real-time orientation and motion tracking.
- **SPI:** Configuration of the Serial Peripheral Interface (SPI) for fast and reliable communication between devices.
- **ROS bridge:** Development of a ROS bridge to enable seamless communication between robotic hardware and software.

## Introduction

INTRO

### 1. PWM from Raspberry

TITLE:

- item 1.
- item 2.
- item 3.
- item 4.

## **2. Switching Circuit**

TITLE:

- item 1.
- item 2.
- item 3.
- item 4.

## **3. DC Motors**

TITLE:

- item 1.
- item 2.
- item 3.
- item 4.

## **4. Inertial Measurement Unit (IMU)**

TITLE:

- item 1.
- item 2.
- item 3.
- item 4.

## **5. Serial Peripheral Interface (SPI)**

TITLE:

- item 1.
- item 2.
- item 3.
- item 4.

## 6. ROS bridge

TITLE:

- item 1.
- item 2.
- item 3.
- item 4.

## Conclusion

CONCLUSION