



# Automobile Hacking and Security

Find vulnerabilities loopholes and security threats in your own vehicle

1.0v

Basic Question is

---

**How to communicate with car?**

How to communicate with car?

---

## **CAN** (Controller Area Network)

What is CAN ?

How CAN Protocol Work?

How can we communicate with CAN with our laptop?

What are the hardware requirements?

# Communication Protocols

---

## **What is Communication ?**

Means of sending or receiving information!

Or

Defined as the transmission of information

# Communication Protocols

---

In terms of embedded systems communication can be done between

- Microcontrollers
- Integrated Circuits
- Peripheral devices etc ...

# Communication Protocols

---

Types of Communication

- **Parallel Communication**
- **Serial Communication**

# Parallel Communication



**Parallel Communication Example**

# Parallel Communication

---

Examples: ISA, ATA, SCSI, PCI