

# RFID /NFC Attacks

Ahmed Alroky ©



# About RFID /NFC

## ▶ RFID

- ▶ stands for : Radio-frequency identification
- ▶ Freq : 125khz
- ▶ Uses : tracking , marketing , identification

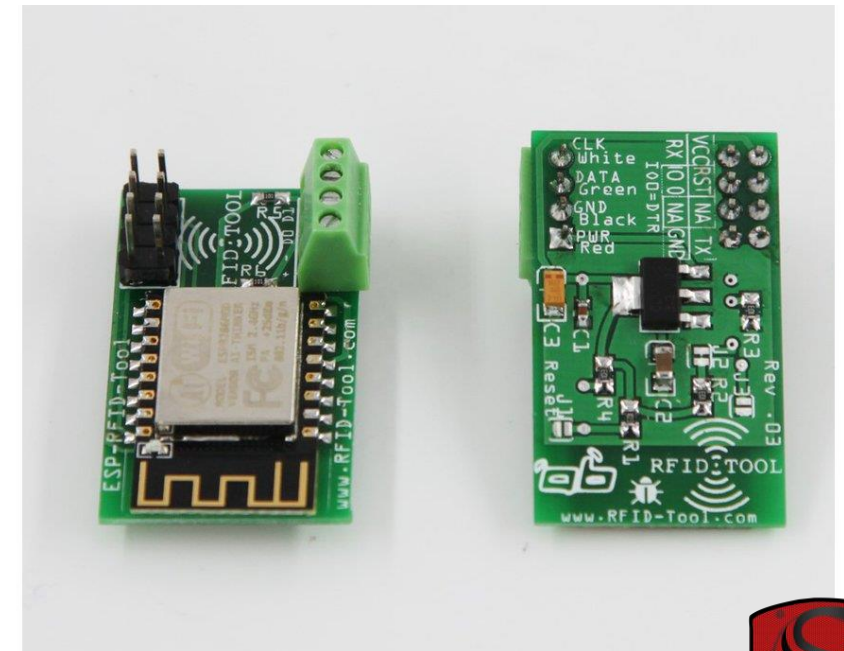
## ▶ NFC

- ▶ stands for : Near Field Communication
- ▶ Freq : 13.56mhz
- ▶ Uses : payments , information sharing , identification



# Cracking and manipulation

- cracking id : mission impossible film
- ESP RFID key / BLE key : Wiegand interface
- unscrew reader and access connection wires
- Play with electromagnetic fields



# Emulation

- chameleon
- Proxmark3 rdv4
- keysy



# cloning

- Proxmark3
- Rfid cloner

