

Raspberry Pi Hands-on Seminars

Home Automation

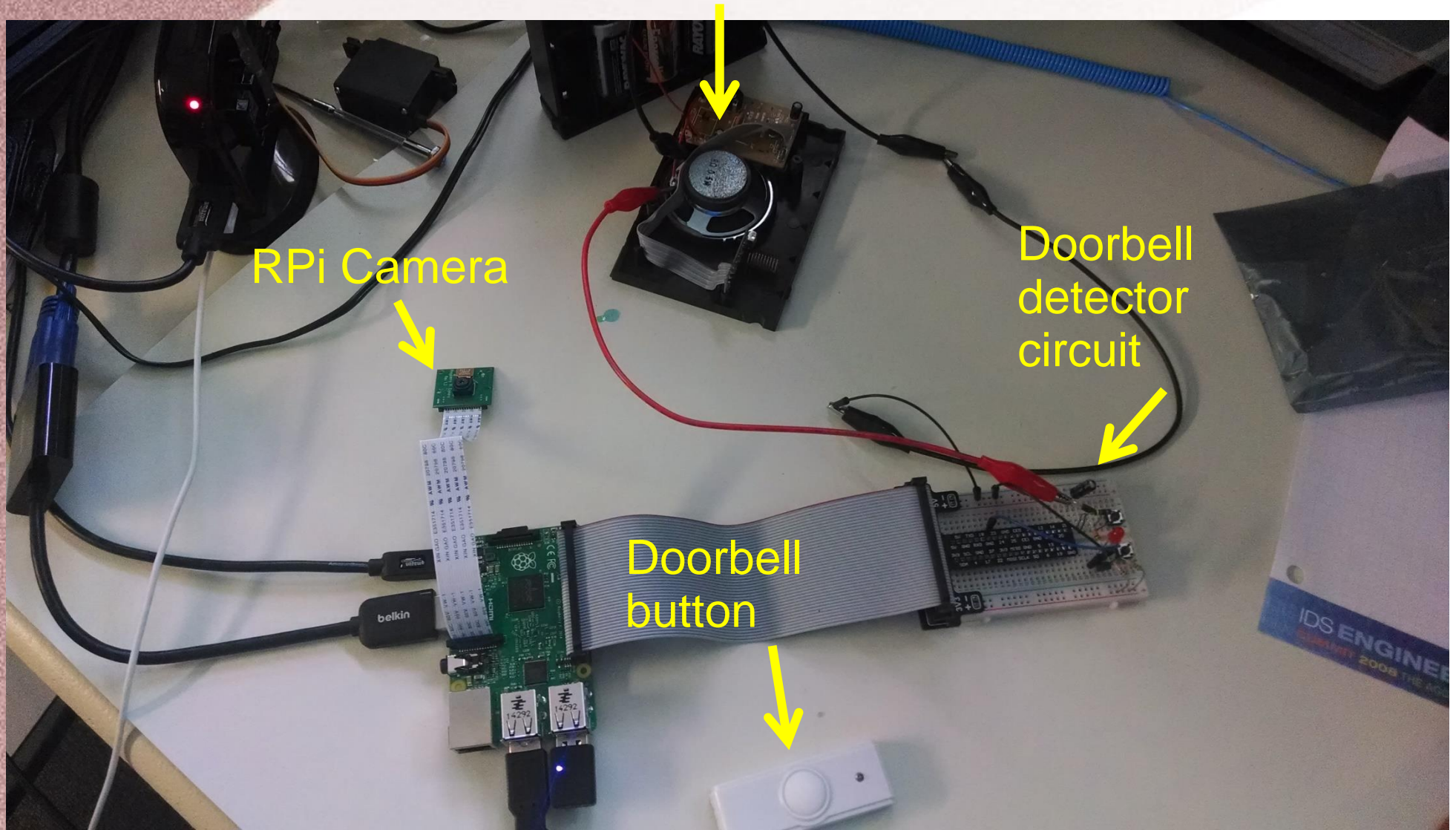
Doorbell that sends a picture

Overview

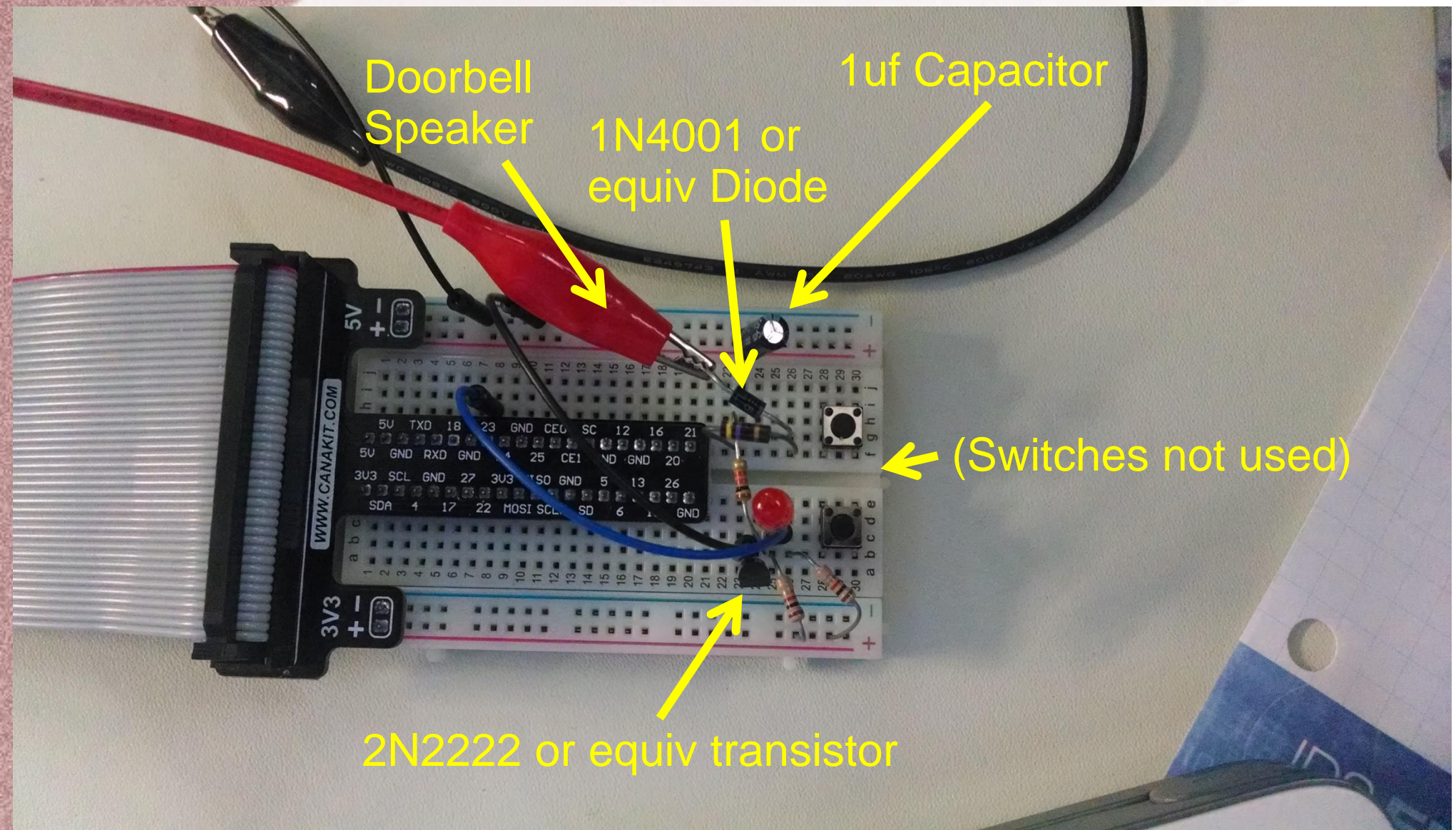
- Person presses your doorbell
- RPi takes picture of person
- RPi emails picture alert to your phone
- Learning:
 - Electronic interface to doorbell
 - RPi interrupts, camera, email

Components

Wireless Doorbell
(IQ America WD2021-DCTB)

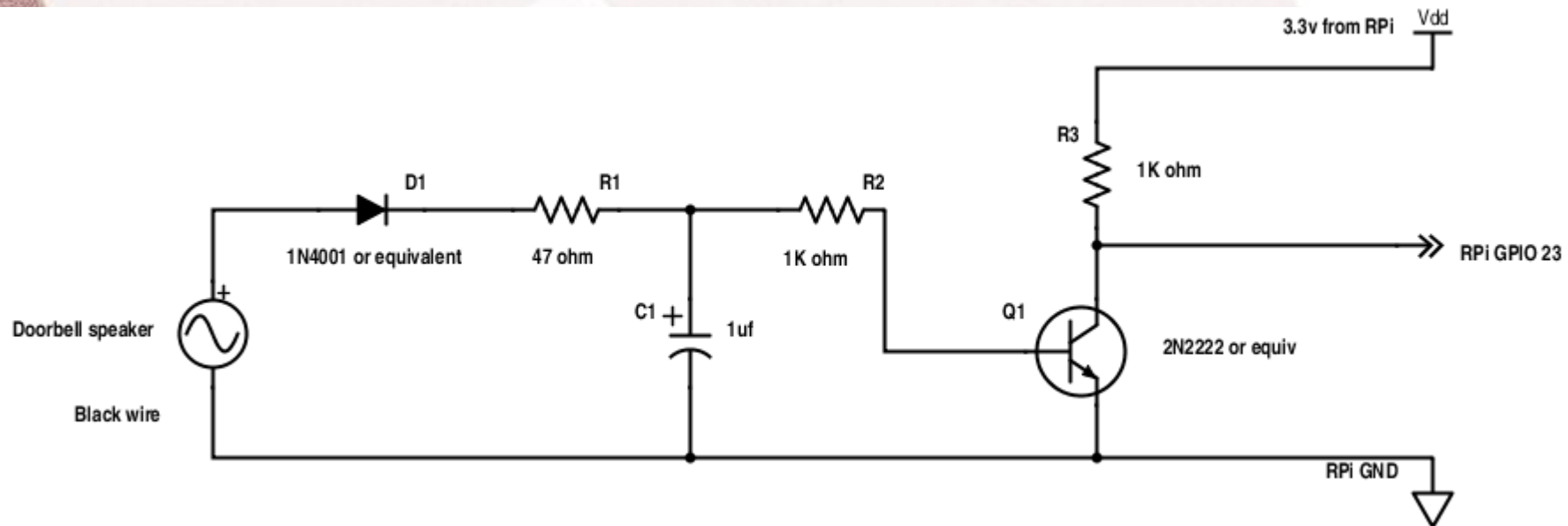


Doorbell Detector Circuit



Circuit

- Diode clips negative voltage
- C1 charges through R1
- Turns transistor on when $C1+ > 0.7v$
- Rpi GPIO 23 senses falling edge interrupt



Code

- <http://github.com/griffegg/doorbell>

Questions ?

- Please remember to fill out the seminar survey
- Thanks!