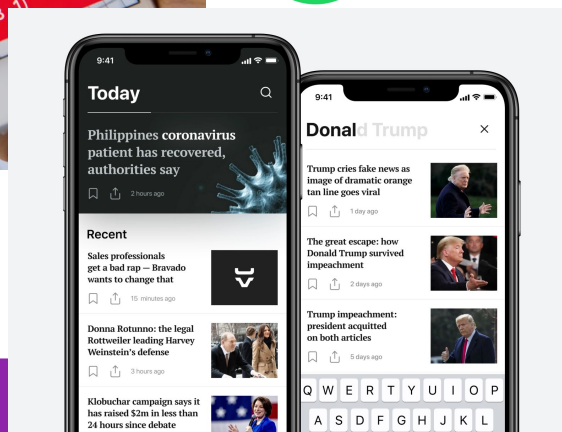
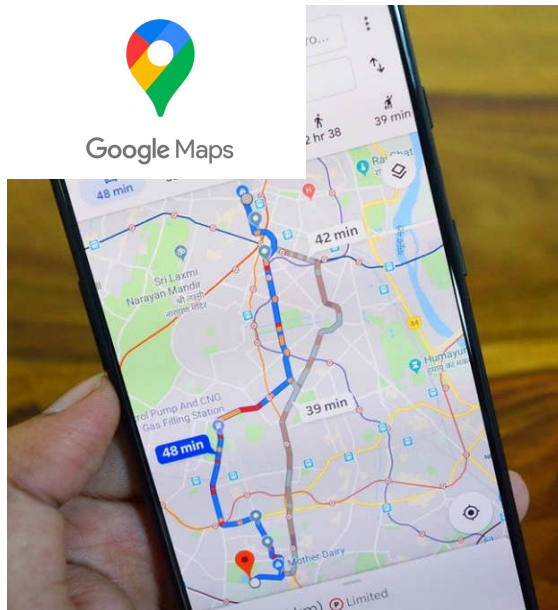


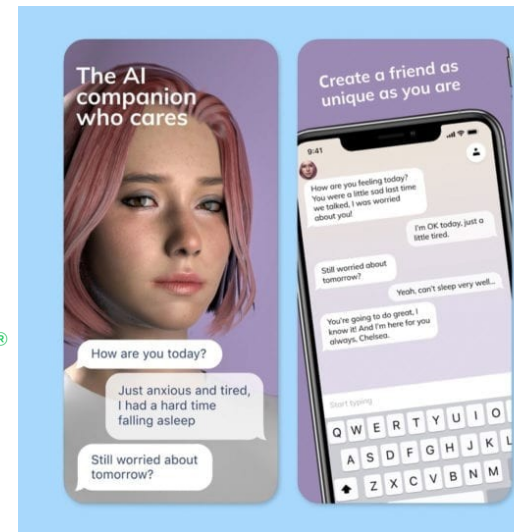
Umelá inteligencia v smartfóne

Miroslav Hájek

Aplikácie využívajúce AI?



Replika



News Agreggator Book sumarizer

Senzory

Čo snímajú?	Názov
Obraz	Fotoaparát, Kamera
Zvuk	Mikrofón
Dotyk	Dotyková obrazovka, Otláčok prsta
Prostredie	Teplomer, Barometer
Pohyb	Akcelometer, Gyroskop
Blízkosť (Proximity)	Infra-červený senzor
Poloha	GPS, Kompas
Konektivita	<i>Wifi, Bluetooth, GSM, NFC</i>

Bežná funkcionality

- Kontrolné centrum s pomocou Cloudu
- Hlasový asistenti
 - (Google asistent, Siri, Cortana)
 - Písanie (NLP), Ovládanie, Vyhľadávanie
- Autocorrect (Oprava pravopisu a dopĺňanie)
- Inteligentné foto-filtre
 - (Rozmazanie pozadia, Redukcia šumu, Odstránenie prekážok, Stabilizácia)
- Rozpoznávanie objektov (AR, VR)
- Modelovanie správania a profilovanie
 - Odporúčania na produkty, služby



Inteligentná domácnosť

Miroslav Hájek

Pre septimu (2020/21)

Rozdelenie podľa miestností

- Prostredie domácnosti a údržba
- Miestnosti
 - Predsieň
 - Obývačka
 - Kuchyňa
 - Kúpeľňa
 - Spálňa
 - Garáž
- Okolie – záhrada, pred vchodom



Dialkové ovládanie cez smartfón



Ekosystém



Inteligentné spotrebiče



Smart Kitchen and Bath

Avoid serious potential dangers due to forget to turn off the gas stove, gas tank, water tap, make life safer.



Air & Environment Monitoring

Real-time monitoring indoor temperature, humidity, formaldehyde and other environment condition. Control air conditioner, curtain, fan and other environmental improvement system through smart link according to current air quality. Create a comfortable, health living environment.



Smart Lighting

ON/OFF remote and adjust the atmosphere in smart house by changing the color of RGB bulb through APP.



Smart Home Appliances Control

Instead of traditional remote controller, using smart phone to remotely control all smart appliances, support timer and power metering function.



Smart Security Protection

Support combination and smart link of smart door sensor, smart motion sensor, smart IPC and other security equipments, to guard against the thief invasion and protect home security.



Frekvenčné pásma pre IoT

RLAN - 2,4 GHz, 5 GHz



GSM - 868 MHz; 1,7 GHz, 1,8 GHz



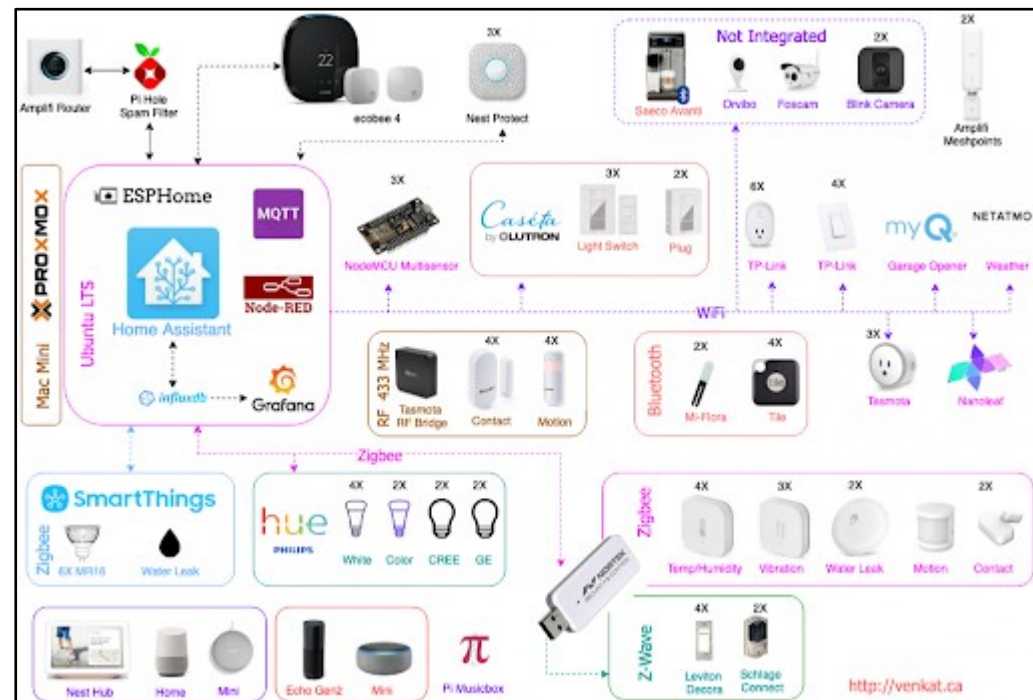
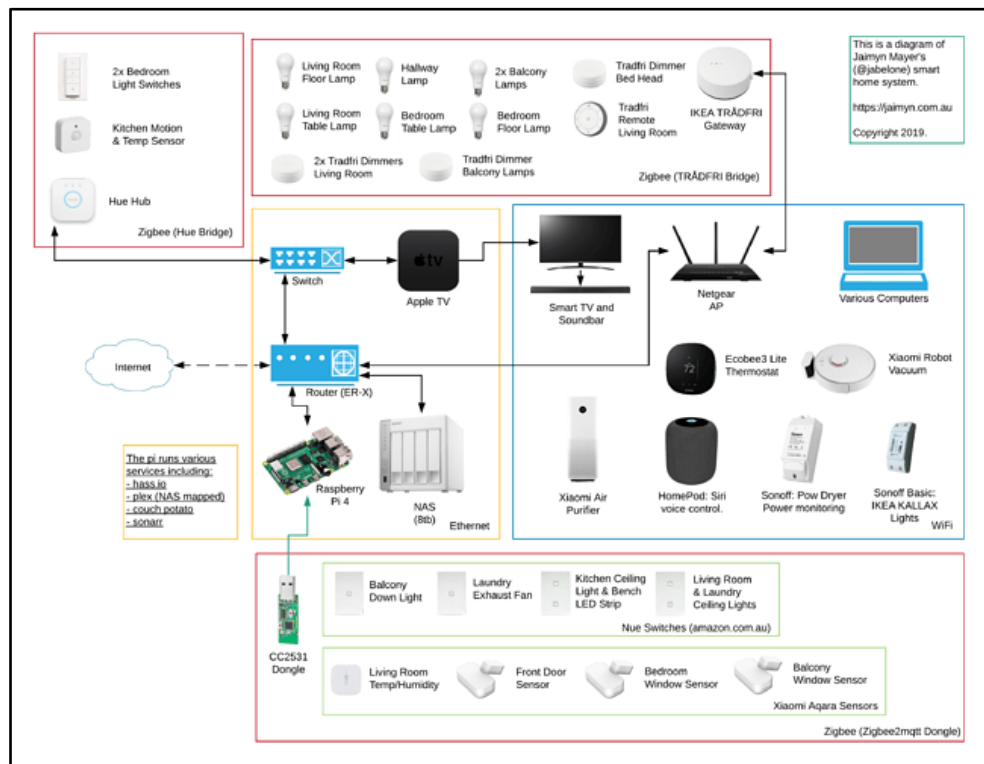
RFID - 125 kHz, 13,56 MHz, 868 MHz



Širokopásmový prenos dát
863 MHz, 57 - 71 GHz

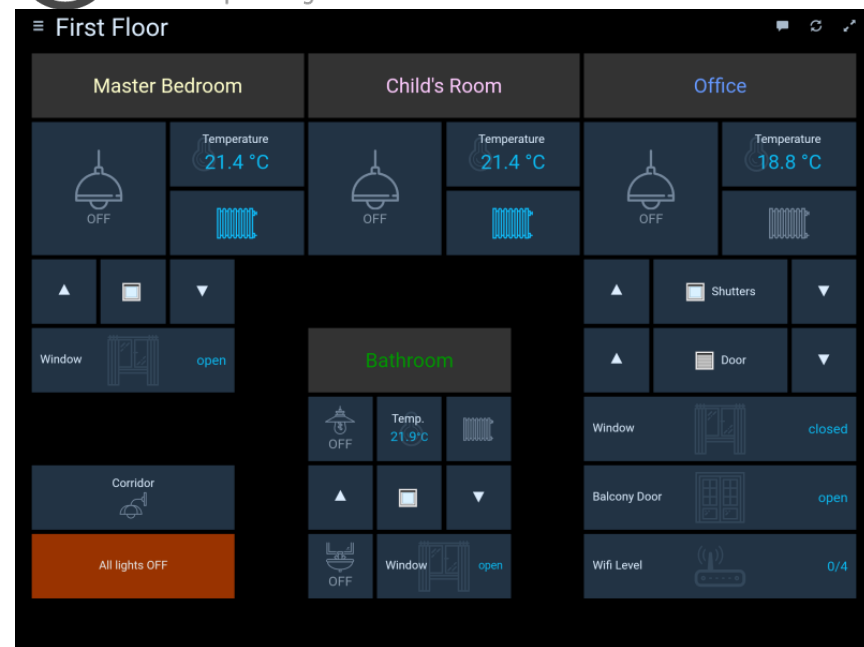
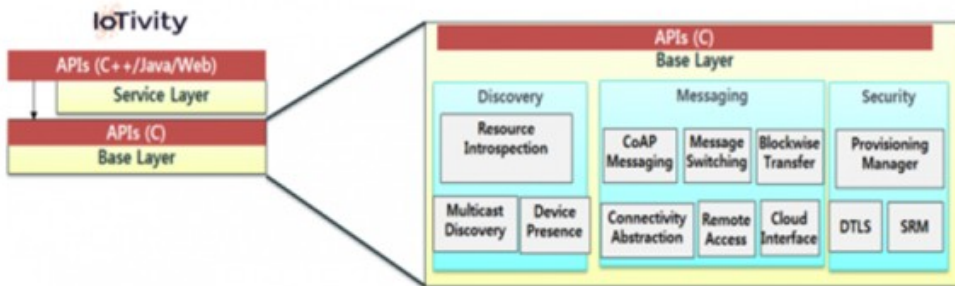
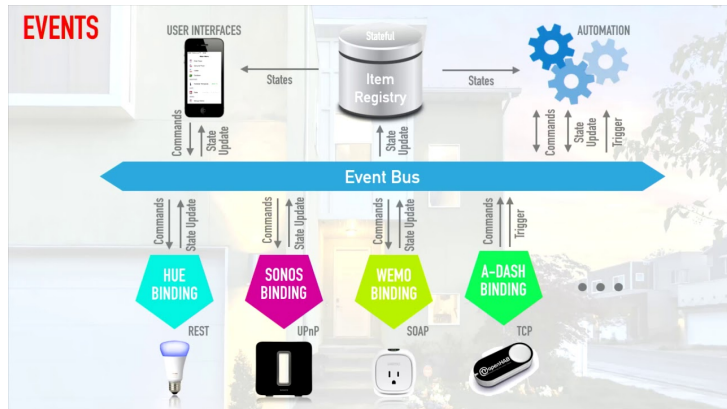



Sieťové technológie v domácnosti



Otvorené riešenia

<https://www.openhab.org/>
<https://iotivity.org/>





admin
http://localhost:8080

No pages

Administration

- Settings
- Things
- Model
- Items
- Pages
- Rules
- Schedule

Developer Tools

Help & About

New Z-Wave Serial Controller

Back Add

Z-Wave Serial Controller

Z-Wave USB Stick with Serial Interface

General Settings

Unique ID	37bc116b7e <small>Note: cannot be changed after the creation</small>
Identifier	zwave:serial_zstick:37bc116b7e
Label	Z-Wave Serial Controller
Location	e.g. Kitchen

Show advanced ☐

Port Configuration

Serial Port

Please fill out this field.


Set the serial port used to access the Z-Wave stick.

Z-Wave Network Settings

Default Wakeup Period

Set the system wide default wakeup period for battery devices (in seconds).

Z-Wave Network Heal



admin
http://localhost:8080

No pages

Administration

- Settings
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Developer Tools

Help & About

Add a new Thing: hue

Back

Search

Scan Again

Discovered Things

- Hue Bridge (192.168.1.123)
00178820a6f9
hue:bridge

Add as Thing

This will create a new Thing of type hue:bridge with the following name:

Hue Bridge (192.168.1.123)

Cancel OK

hue:bridge
Hue Bridge
The Hue bridge is a central hub for your Hue lights.

hue:0850
CLIP Genie
A generic scene.

hue:0840
CLIP Genie
A generic scene.

hue:0200
Color Light
A dimmable light with changeable colors.

hue:0220
Color Temperature Light
A dimmable light with tunable color temperature.

hue:0100
Dimmable Light
A dimmable light.

hue:0110
Dimmable Plug-in Unit
An outlet that can be dimmed.

hue:0210
Extended Color Light
A dimmable light with changeable colors and tunable color temperature.

