

FridgePI

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A smart fridge for lazy people

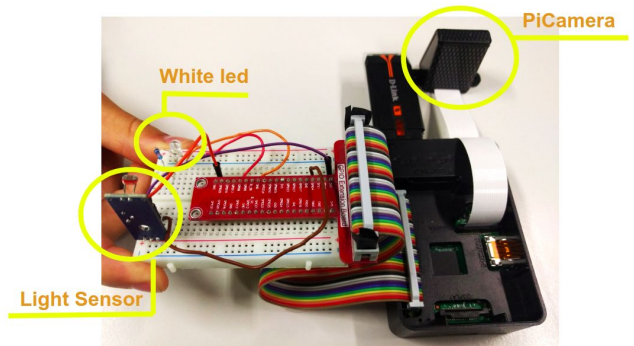
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Mobile and
Cyber-Physical System

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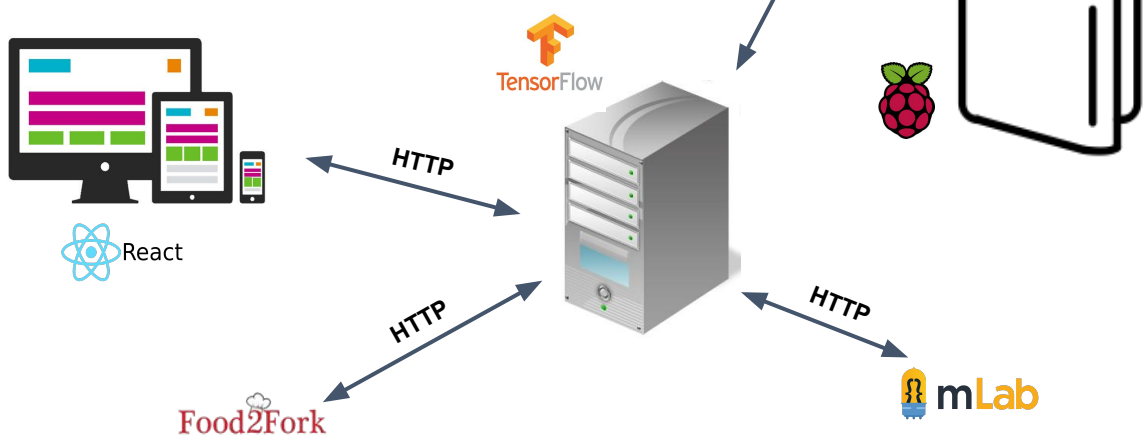
What's in my fridge? What can I eat for dinner?

A fully automated monitoring system for your fridge

- No overhead for you
- Always available everywhere
- Always up-to-date
- A good recipes advisor
- A lot of possible extension



System architecture



Use cases:

1) Feeds your needs and it's always available



2) Semantic segmentation, image recognition and a good advisor

3) Installation

1. Plug in
2. Push WPS button
3. Add it to your devices list
4. That's all folks!



Image recognition



Generated list:
- 'beans': 0.7679
- 'corn': 0.6079
- 'tomato sauce': 0.4357
- 'nuts': 0.5579

Future work

Hardware view:

- more cameras in one shelf
- use a magnetic sensor instead of the light one

Software view:

- integration with google, amazon shopping
- management of a shared list of products
- shopping advisor
- give more info on the products (ex. expiration date)