

# Change the World with IoT and the Peer Web

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@mattpodwysocki

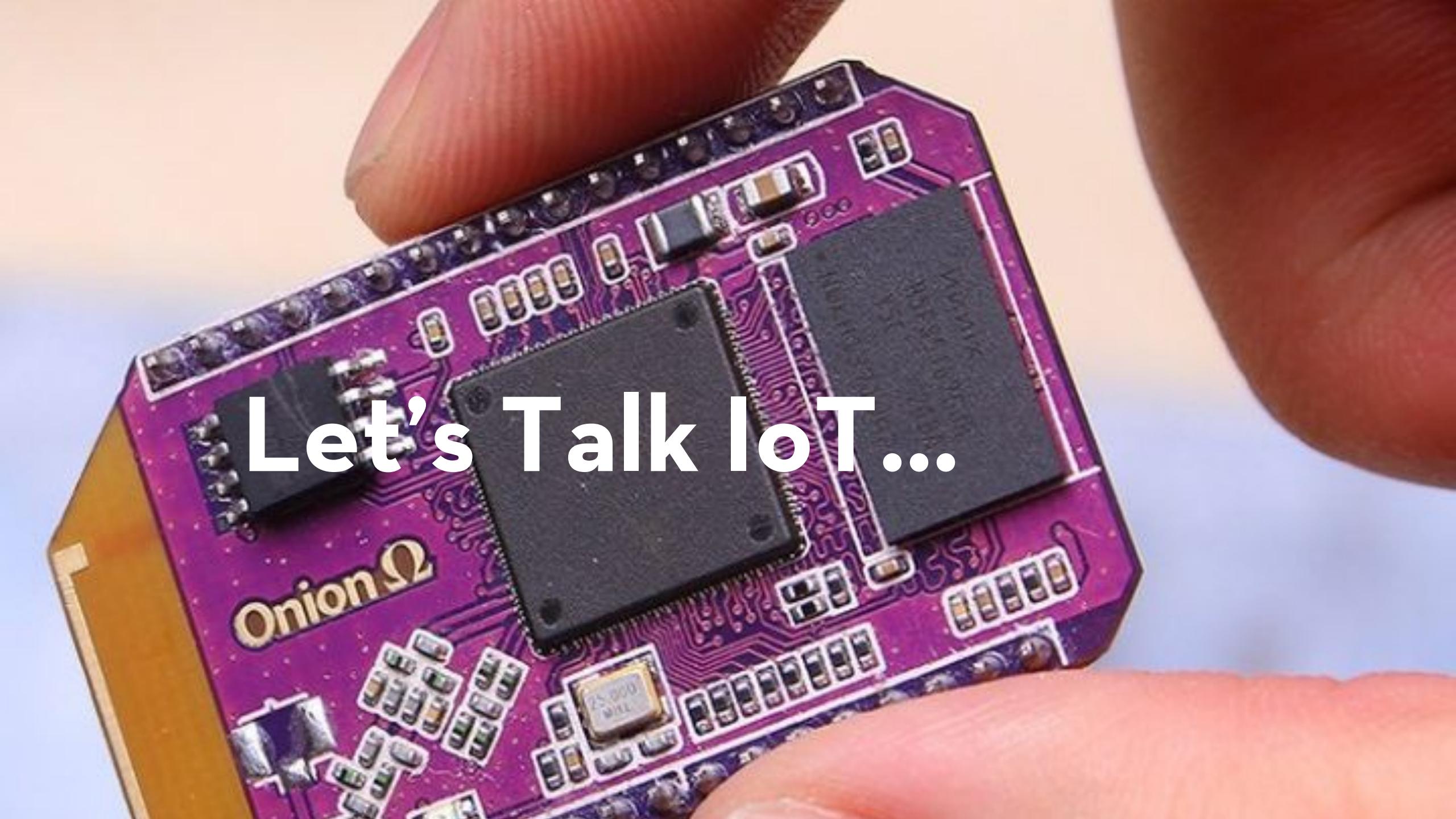
<https://github.com/mattpodwysocki/open-iot-2016>



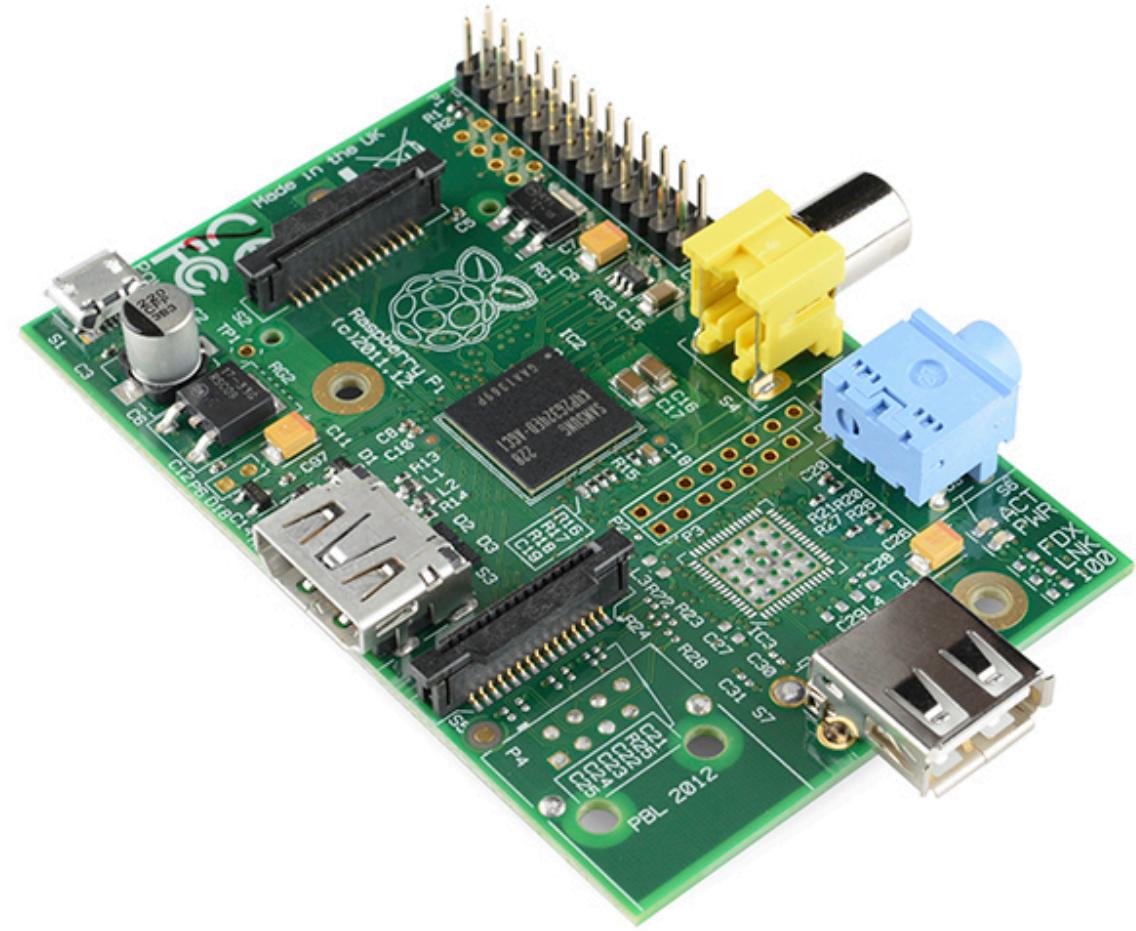


**Principal SDE  
Open Sourcerer**  
**@mattpodwysocki**  
**[github.com/mattpodwysocki](https://github.com/mattpodwysocki)**  
**[github.com/mpodwysocki](https://github.com/mpodwysocki)**

**MICRÖSOFT**

A close-up photograph of a purple Onion Omega IoT development board. The board features a central black microcontroller chip and several smaller components. The text "Onion Omega" is printed on the board. A hand is visible, holding the board from the top and bottom, providing a sense of scale. The background is a warm, out-of-focus indoor setting.

Let's Talk IoT...



The Things Are Everywhere...

**Let's take on big challenges...**





Re-invent manufacturing...



**Change the face of farming...**



Help in times of crisis...



@ThaliProject

<http://thaliproject.org>

<http://github.com/thaliproject>



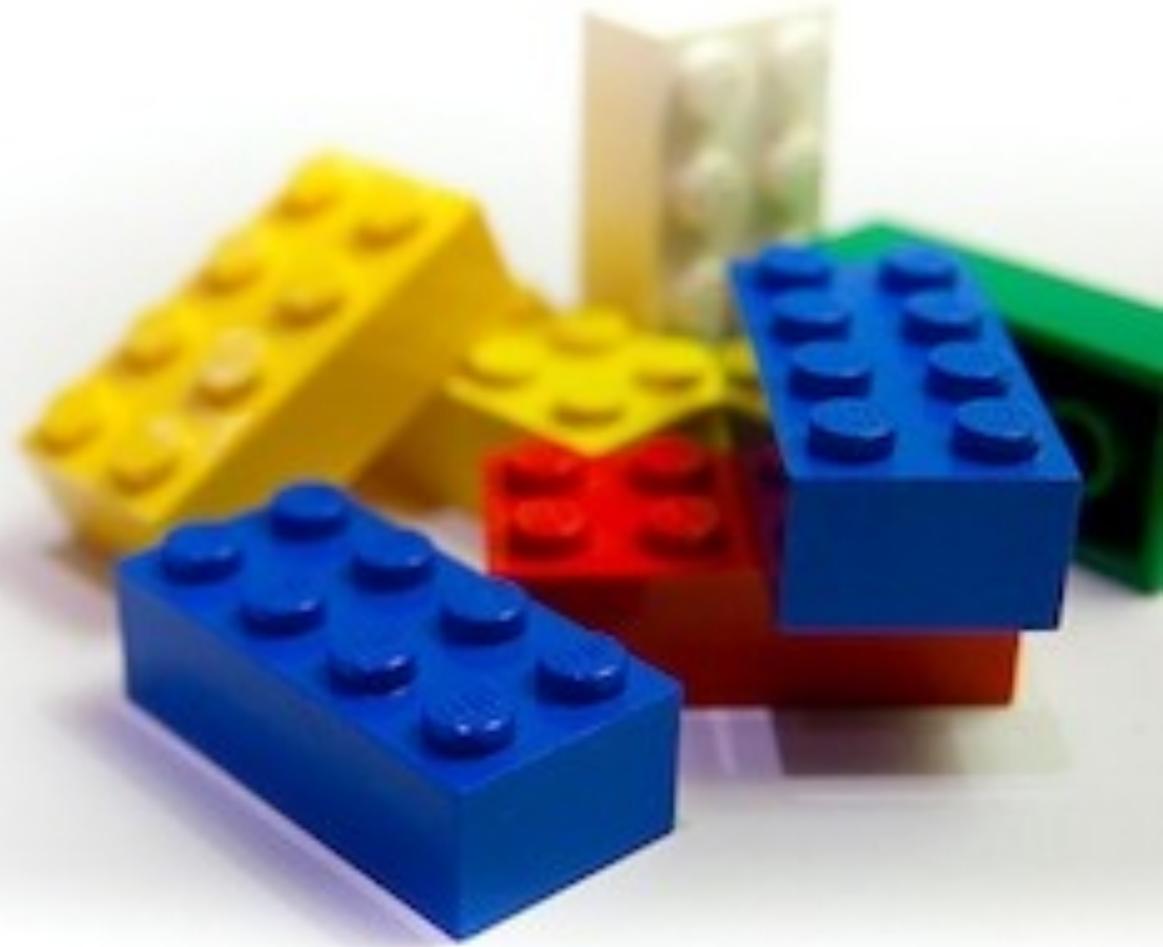
Enable Local Discovery...



# Secure Synchronization...



**But the most important “thing” is...**



**How do we build it?**

Always Bet on **JS**



**Your device as a server...**

# JXcore

We want Node to run on EVERY device...

# Node.js on ChakraCore

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This project enables Node.js to optionally use the ChakraCore JavaScript engine. This project is still **work in progress** and not an officially supported Node.js branch. Please refer to the original [PR](#).

## How it works

To enable building and running Node.js with the ChakraCore JavaScript engine, a V8 API shim (ChakraShim) is created on top of the ChakraCore runtime hosting API ([JSRT](#)). ChakraShim implements the most essential V8 APIs so that the underlying JavaScript engine change is transparent to Node.js and other native addon modules written for V8.

A rebuild node.exe and native addon modules with ChakraCore is required for this to work.

## Issues

Please report all issues related to Node-ChakraCore on this separate [issue page](#).

## Prebuilt Node binaries

You can download and install prebuilt Node-ChakraCore from [here](#).

# WiFi Shoplist

By Oguz Bastemur

Open iTunes to buy and download apps.



[View in iTunes](#)

+ This app is designed for both iPhone and iPad

Free

Category: Productivity

Released: Jul 31, 2015

Version: 0.0.2

Size: 18.9 MB

Language: English

Seller: Oguz Bastemur

[View More by This Developer](#)

## Description

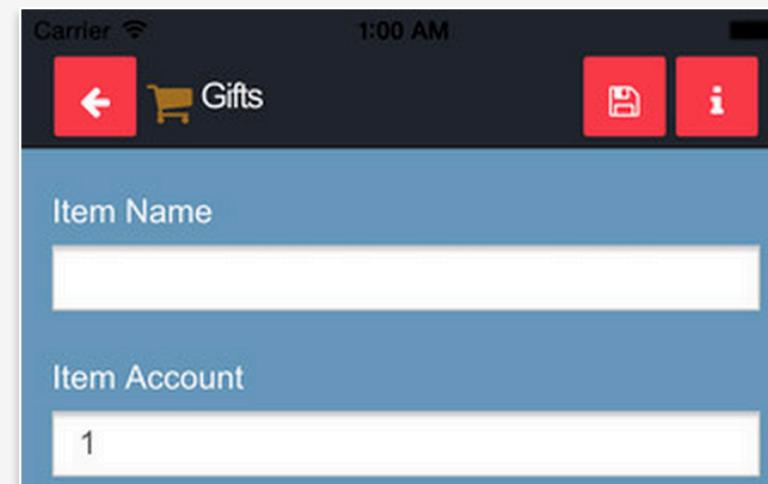
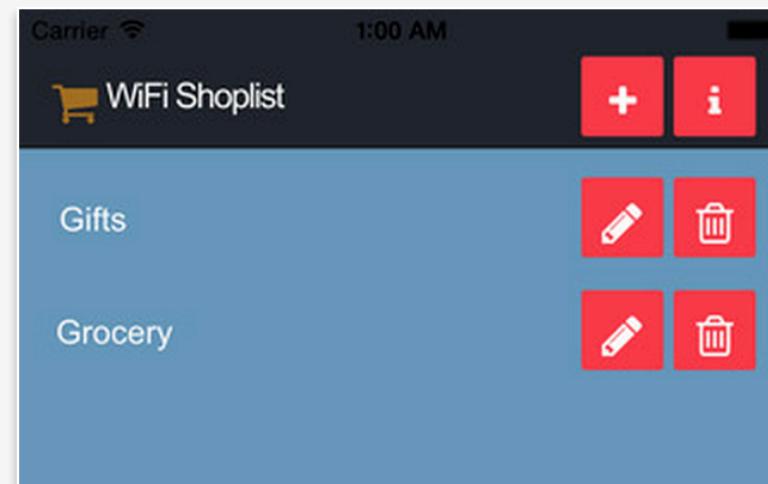
This application makes your shopping list available over WiFi. So, others can contribute to your shopping list from the devices with browser support.

[WiFi Shoplist Support ▾](#)

[...More](#)

## Screenshots

[iPhone](#) | [iPad](#)



<https://itunes.apple.com/us/app/wifi-shoplist/id1022813783>



# WiFi Shoplist

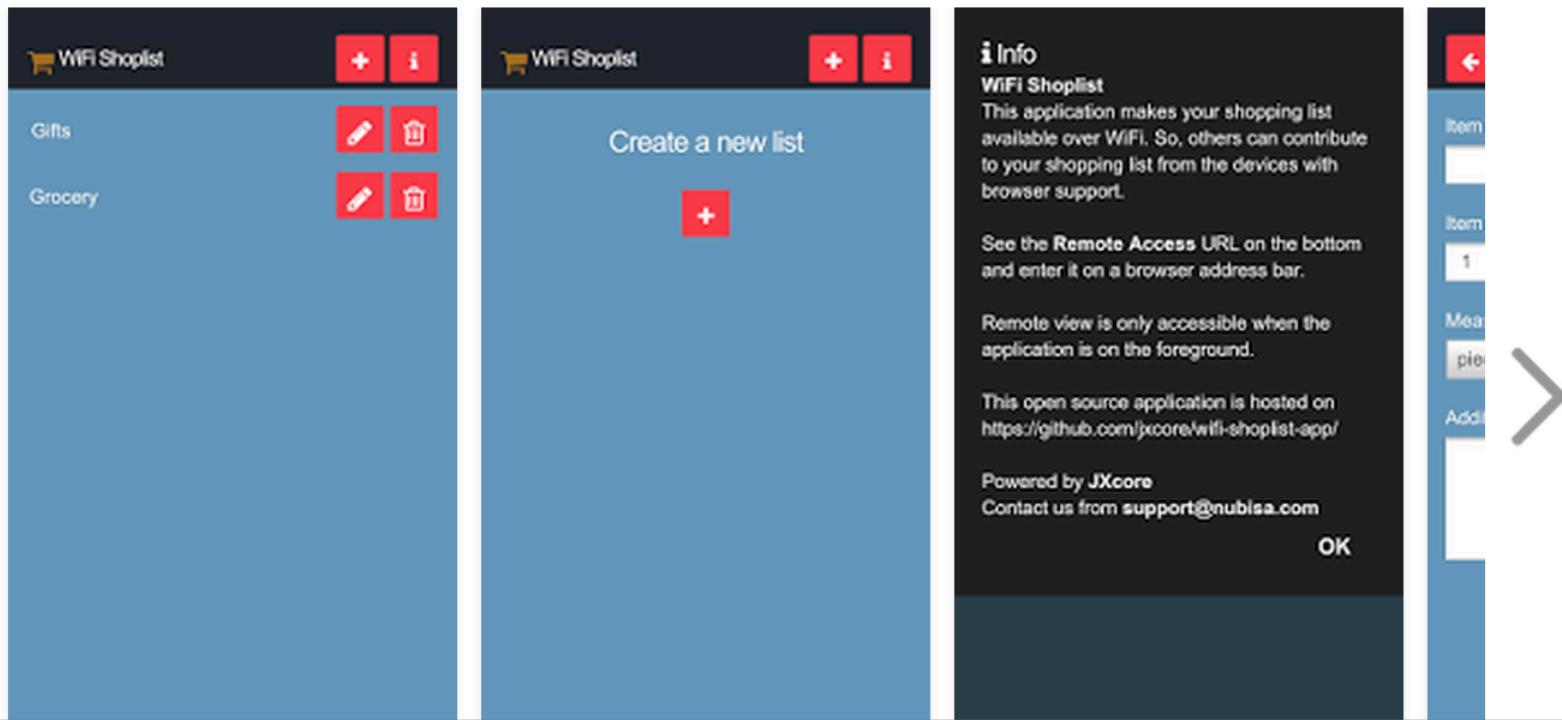
Oguz Bastemur   Productivity

Everyone

This app is compatible with all of your devices.

Add to Wishlist

Install



<http://play.google.com/store/apps/details?id=com.nubisa.WiFiShoplist>



APACHE

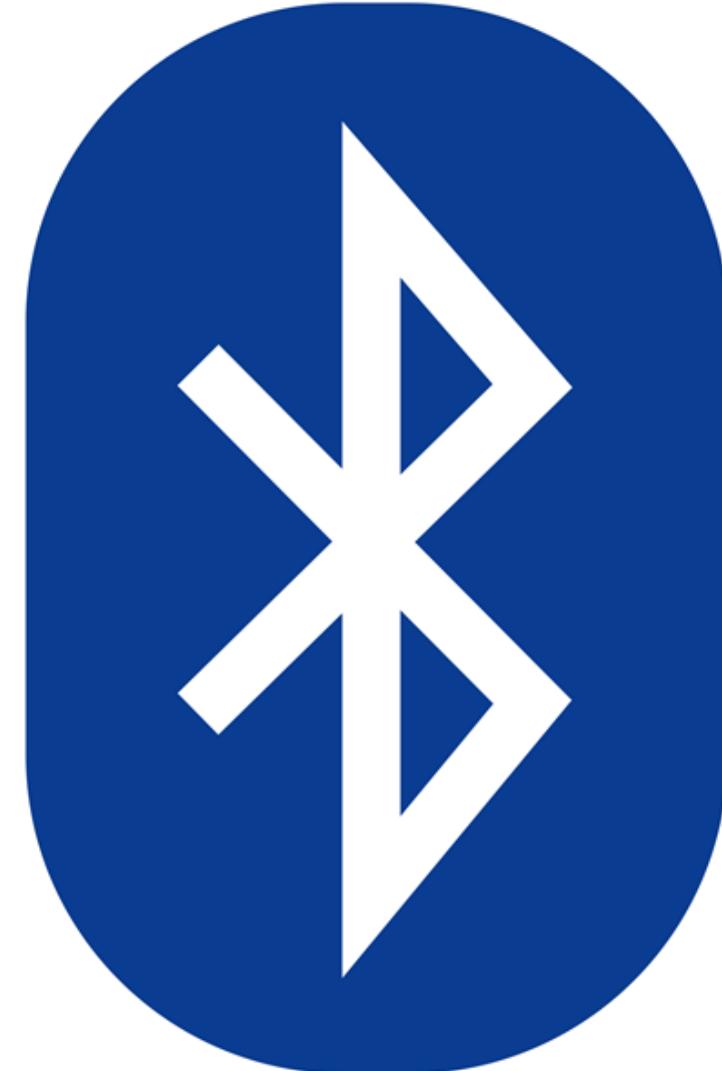
CORDOVA™

We can easily deploy it...



**pouchdb**

**Keep Data in Sync...**



**Enabling Communication...**

**AUTHORIZED  
PERSONNEL ONLY**

**Security? TLS + Public Keys...**

# How do we exchange identities without making our users hate us?



<http://www.goland.org/coinflippingforthali/>





Live or Die by CI



**Project Stanton**  
**@Project\_Stanton**

**Rockwell**  
**Automation**

# SOCIAL NETWORK



**What can I  
build?**



PRIVACY  
IS NOT  
A CRIME

*“Technical identity systems must only reveal information identifying a user with the user’s consent.”*

Kim Cameron’s Law # 1

*“The solution that discloses the least amount of identifying information and best limits its use is the most stable long-term solution.”*

Kim Cameron's Law # 2

*“Digital identity systems must be designed so the disclosure of identifying information is limited to parties having a necessary and justifiable place in a given identity relationship.”*

Kim Cameron’s Law # 3

*“A universal identity system must support both “omni-directional” identifiers for use by public entities and “unidirectional” identifiers for use by private entities, thus facilitating discovery while preventing unnecessary release of correlation handles.”*

**Kim Cameron’s Law # 4**

*“A universal identity system must channel and enable the inter-working of multiple identity technologies run by multiple identity providers.”*

Kim Cameron’s Law # 5

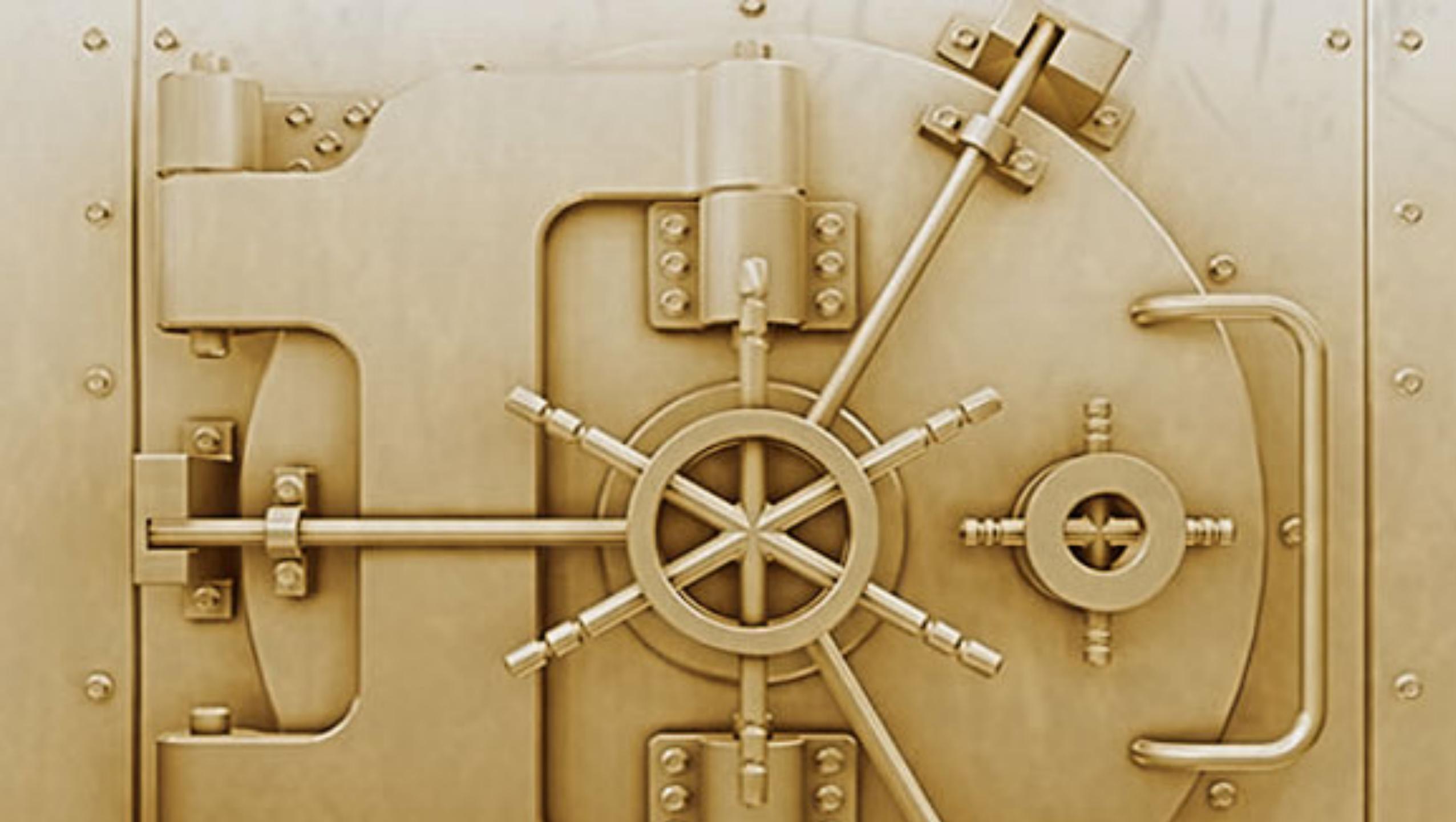
*“The universal identity metasystem must define the human user to be a component of the distributed system integrated through unambiguous human-machine communication mechanisms offering protection against identity attacks.”*

Kim Cameron’s Law # 6

*“The unifying identity metasystem must guarantee its users a simple, consistent experience while enabling separation of contexts through multiple operators and technologies.”*

Kim Cameron’s Law # 7

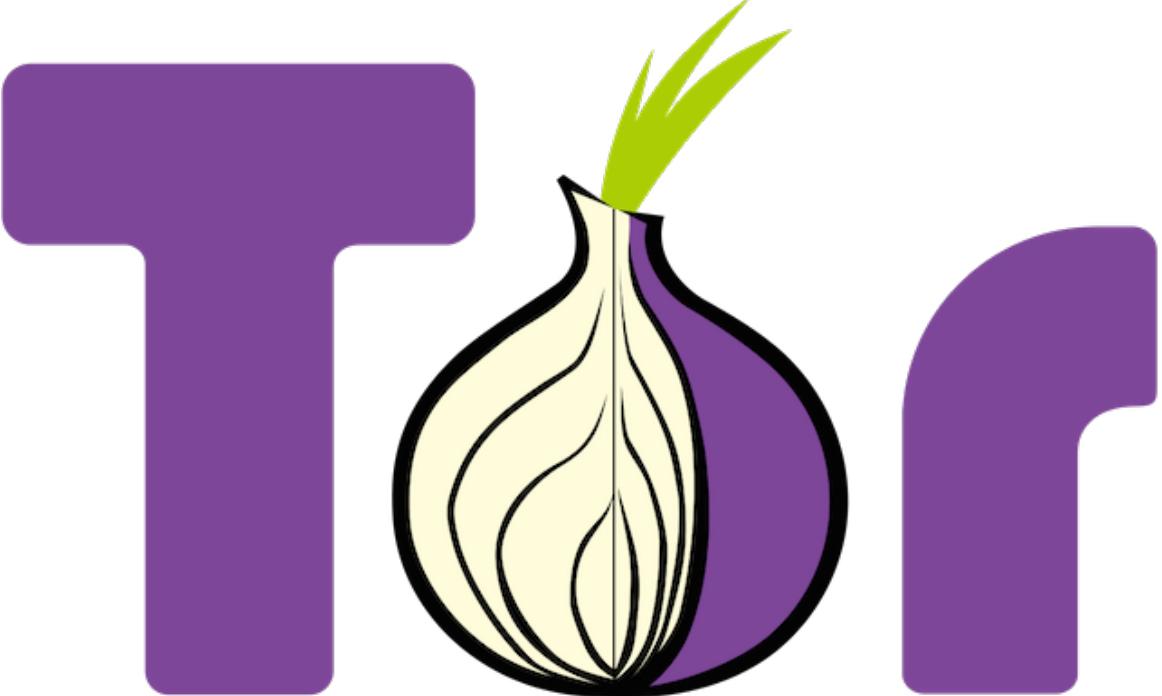
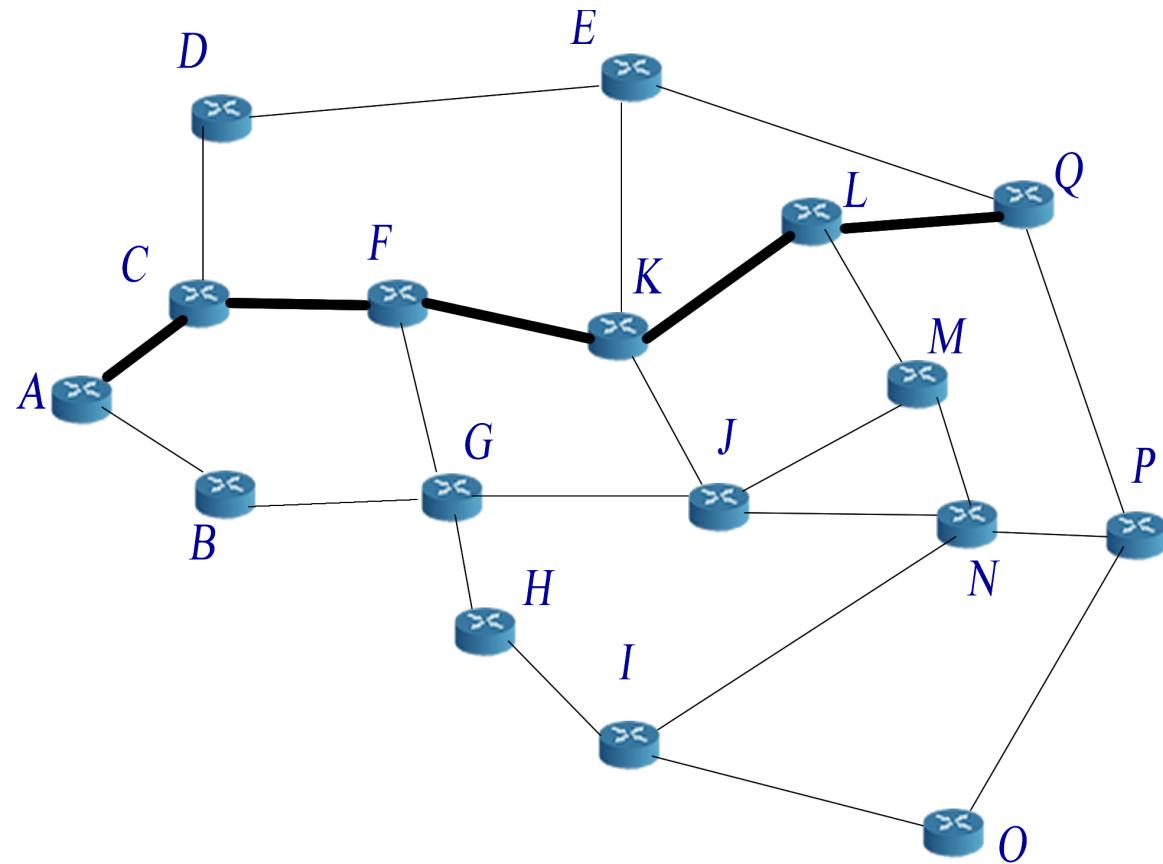
**Isn't this privacy stuff  
a bit of nonsense?**



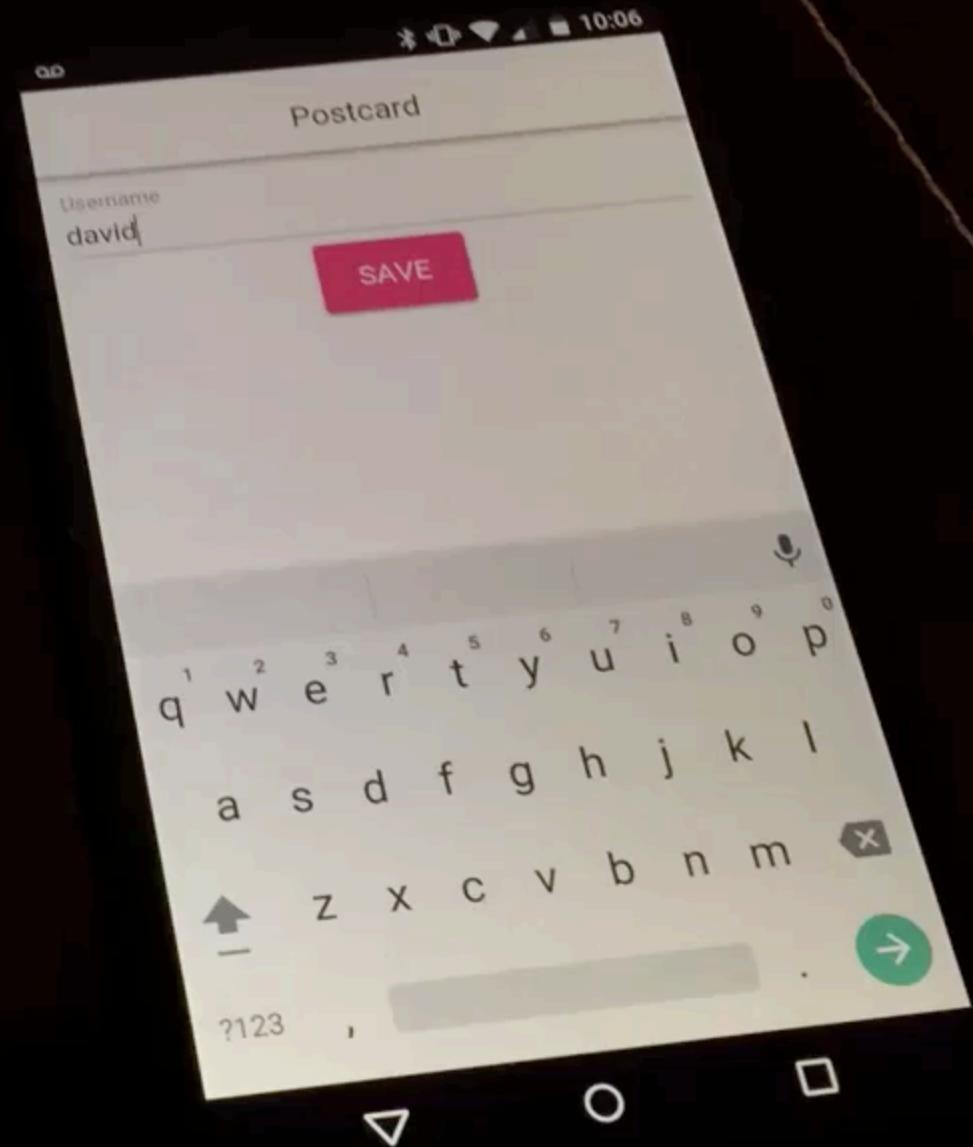
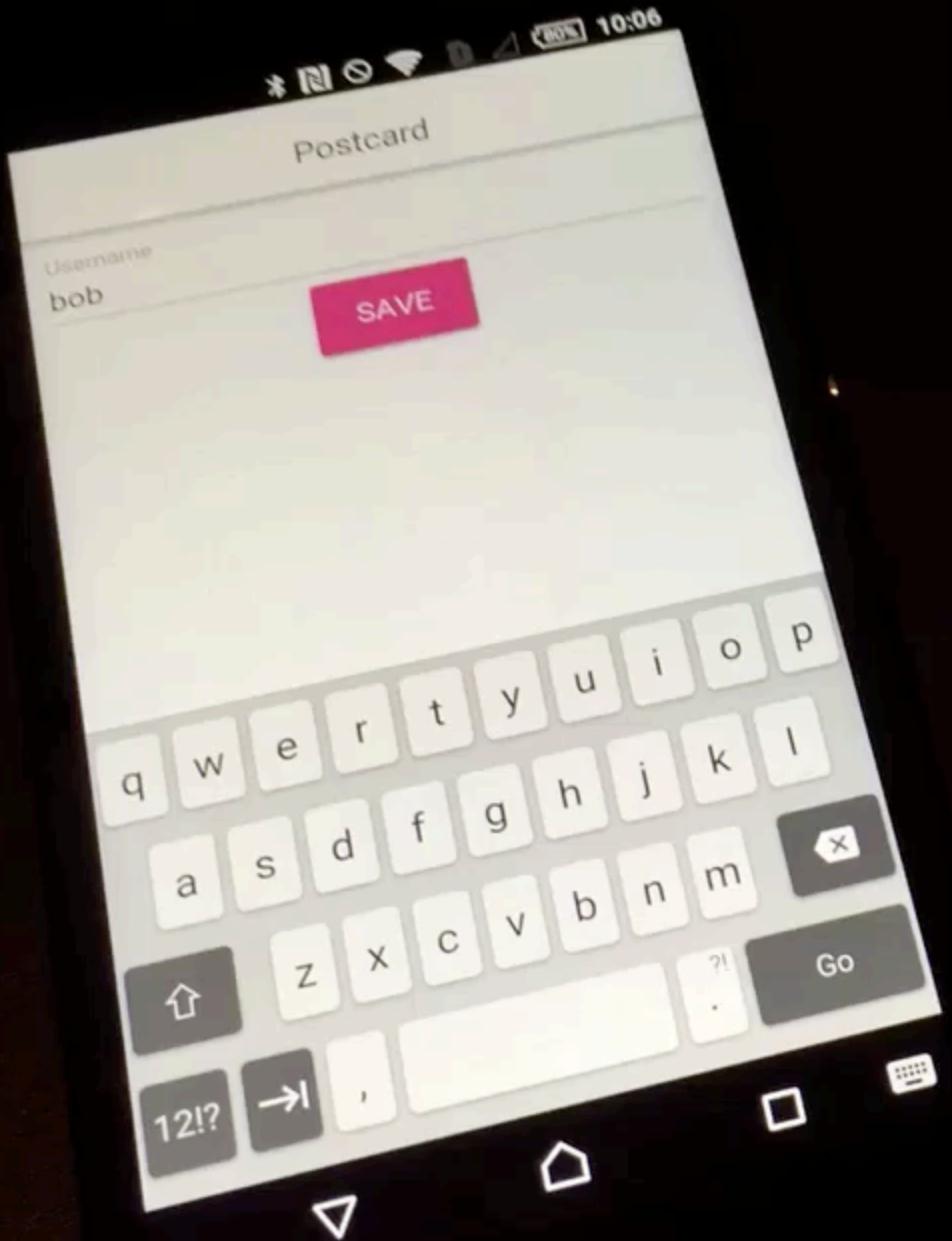


# Help Save Peer to Peer on Android!

<http://www.goland.org/thalilocalp2psurvivingmarshmallow/>



Oh the places we'll go...





thali



P2P web plugin for Android and iOS

```
$ jx npm install thali
```



Via the Washington Post: [wapo.st/1OjJ02P](http://wapo.st/1OjJ02P)

**#MakeThePeerWebGreatAgain**