



DON'T BE RELIGIOUS ABOUT THE INTERNET OF THINGS

Mirko Presser
The Alexandra Institute



@mirkopresser

HYSTERIA

19th

DEPRESSION

20th

OBSESSIVE COMPULSIVE

21st

whisper[ing] words of wisdom...

IoT

It's a 'definition' thing!

互联网 + 物联网 = 智慧的地球

Wen Jiabao, 2009





Settings

Control mode

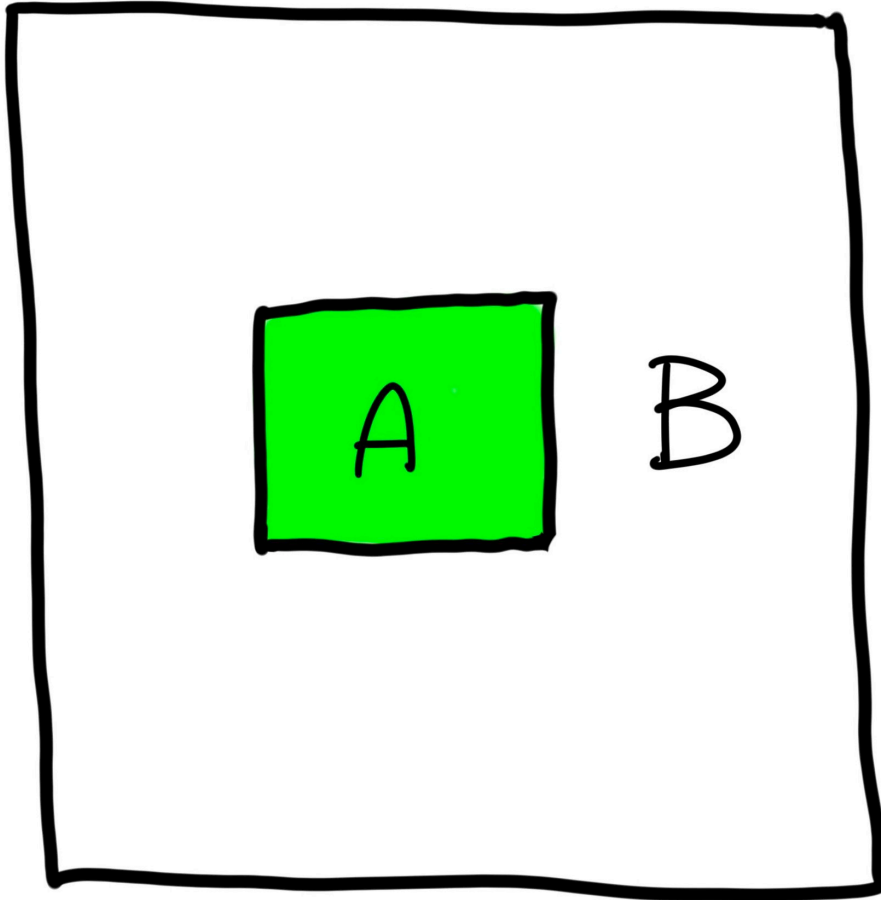
- AUTOADAPT
- FLOWADAPT
- Proportional
- Constant

HIILSTI

What do they all have in common?

They are instantiations of the IoT.

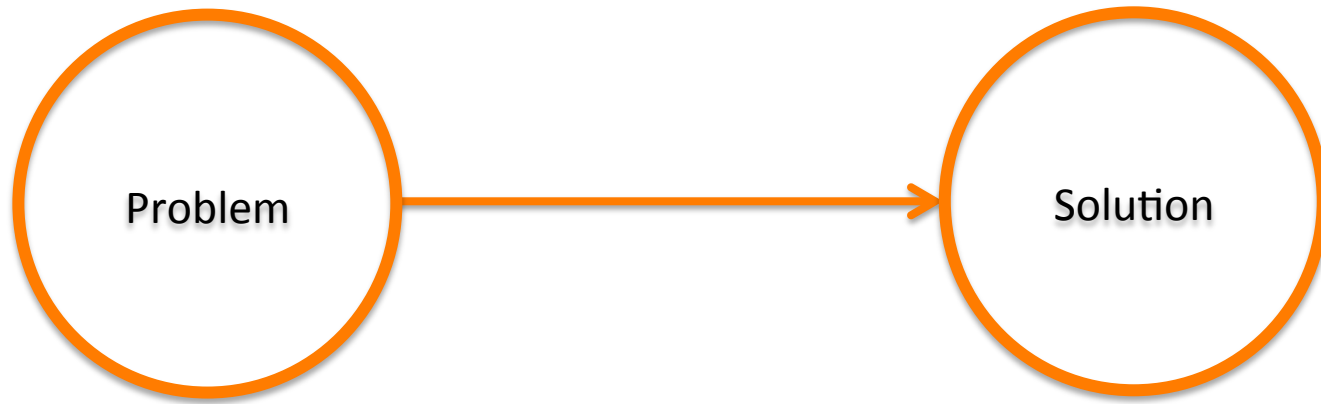
Walled Gardens Explained:



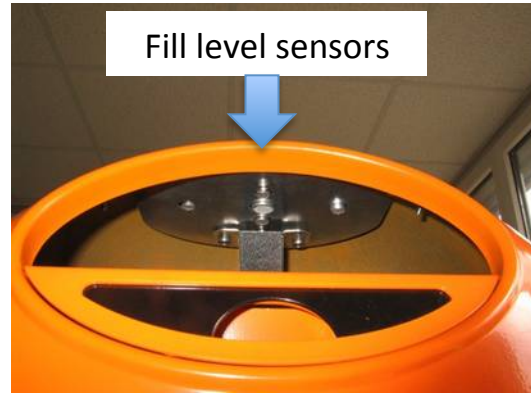
A: Everyone here makes money.

B: Everyone here can go fuck themselves.

@hugh



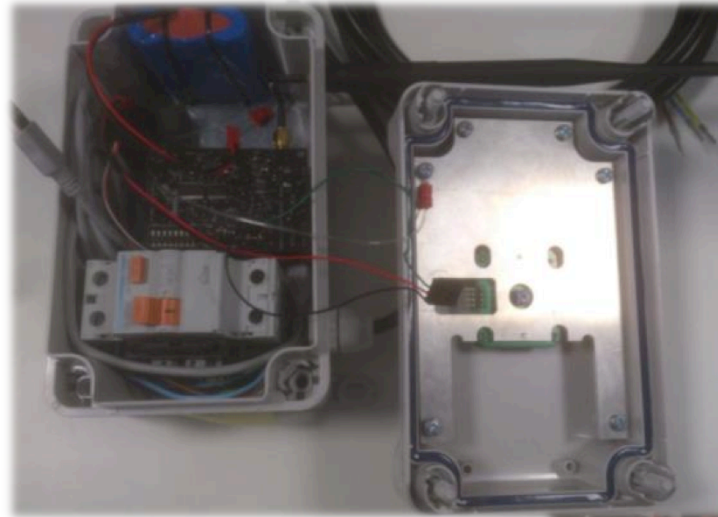
Intelligent public waste baskets



- Ad hoc **fill level** measurements; data transmission to the collection vehicle when it approaches
- Develop assisted application for maintenance and fill level visualisation
- **Main Targets:**
 - Test ***fill level sensors and capillary network*** (integration of sensor nodes with gateways and collection vehicle communication)
 - Evaluate data gathering process of fill level and assisted maintenance (manual malfunction messages, automatic error messages)

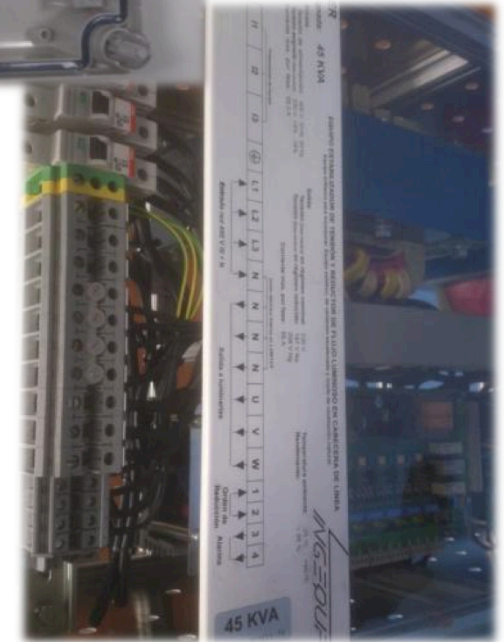
Automatic adaptation of Street Lighting

- **Authority system power regulators:** controls the power provided to lamp post lines
- **Pedestrian flow sensors network:** based on radar technology. Detect people presence on a specific area (city centre street or square)



RADAR sensor node

- **Main Targets:**
 - Test Presence detectors and capillary network (integration of node sensors with repeaters & gateways plus data gathering process)
 - Test communication with Power Regulators (send commands)
 - Verify the adaptability of luminous intensity



*Power Regulator
(Ingequr)*

INGEQUUR

Expert Systems

App
Service

App
Service

App
Service

markets

Data

Data

Data

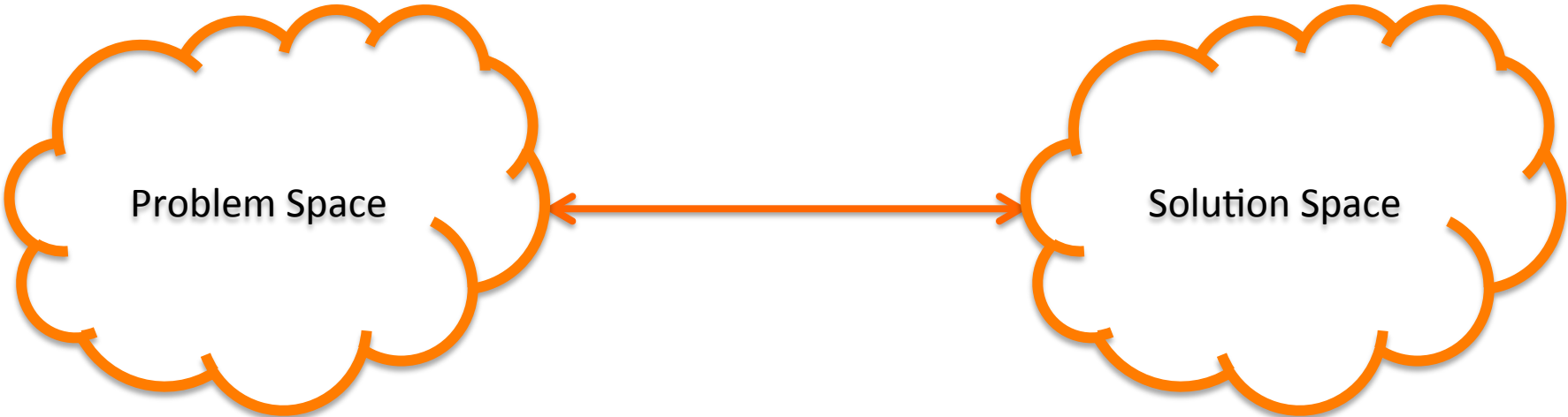
value

Tech
A

Tech
B

Tech
C

technologies



Horizontal – Platform Thinking

Apps/Services

markets

Data^{*n}

Valueⁿ

Platform

technology

"There are two ideas on collision course. The Internet of Things and Open Data. The first one is enabling us to measure and interact with the world in real time, the second one gives that ability to everyone."

me, very recently

Q Søg efter datasæt

53
Datasæt

Seneste datasæt

Morten DD Observationer

3 dage 5 timer since last update

Naturhistorisk Museum 1880 - 1940

3 dage 5 timer since last update

Forumindlæg

ODAA til hack4dk

3 dage 2 timer siden

Fokus på open data i Prosabladet

1 uge 2 dage siden

Velkommen til ODAA



ODAA er en open data platform, hvor åbne data bliver gjort frit tilgængelige, så de er nemme for dig at finde.

Vi håber, at du vil forvandle de åbne data til nye og innovative services og fortælle om det her på platformen.

Du kan [læse mere om ODAA her](#).

Tilmeld dig vores nyhedsbrev

IT-AWARD
MIDTJYLLAND

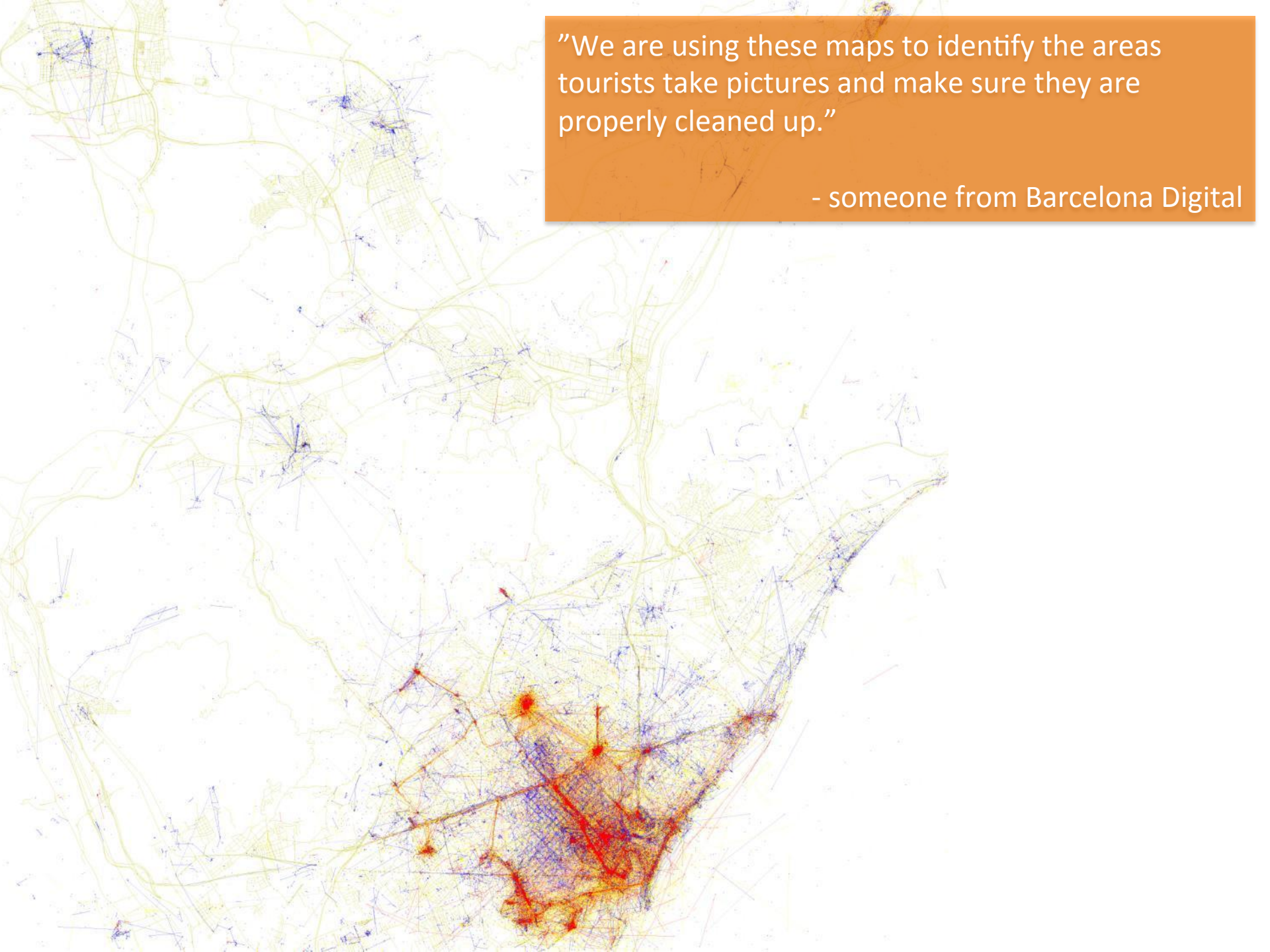


NOMINERET
ÅRETS SMART CITY-PRIS 2013

made
with
Aarhus
Danish for progress

Powered by



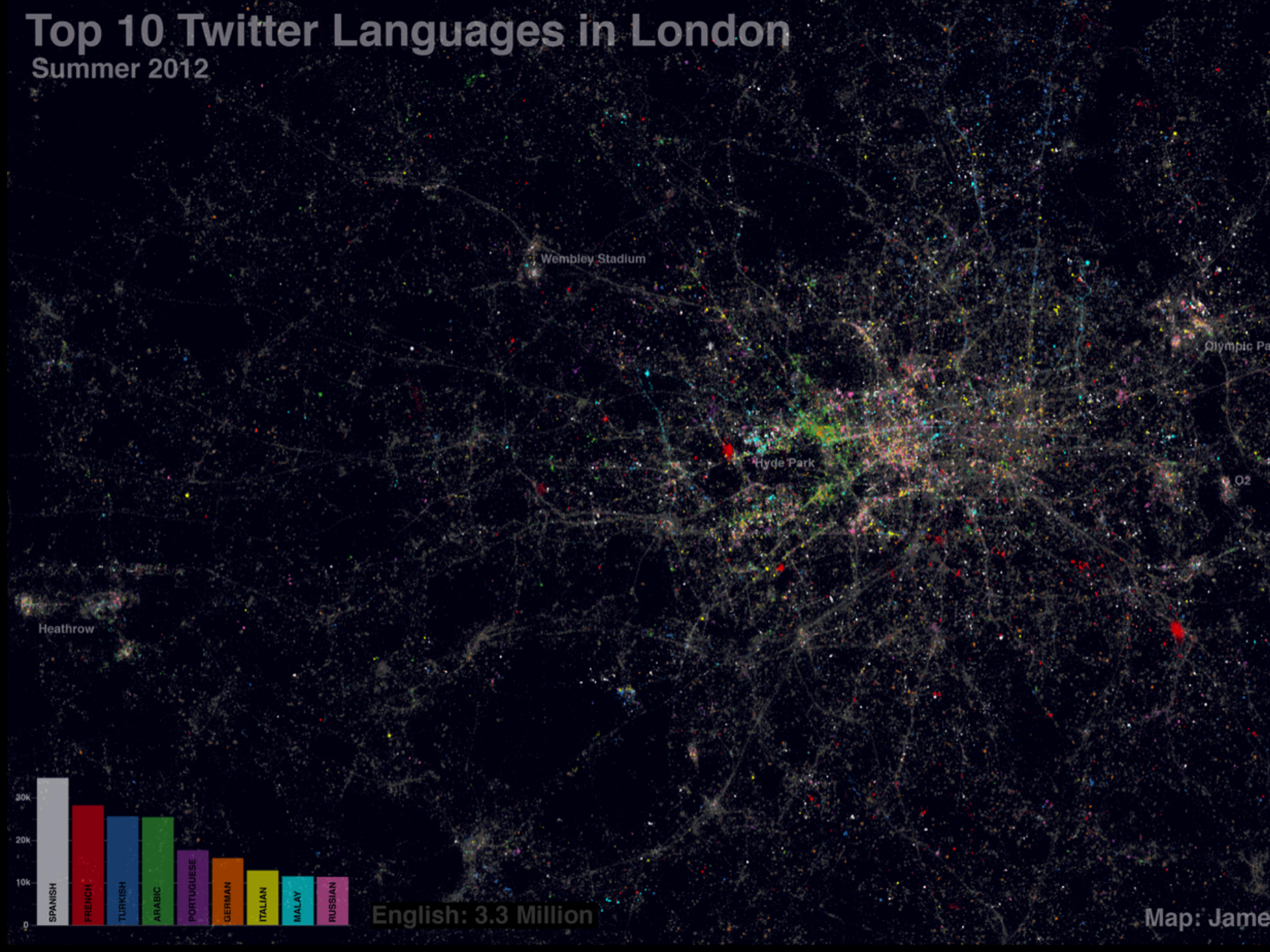


"We are using these maps to identify the areas tourists take pictures and make sure they are properly cleaned up."

- someone from Barcelona Digital

Top 10 Twitter Languages in London

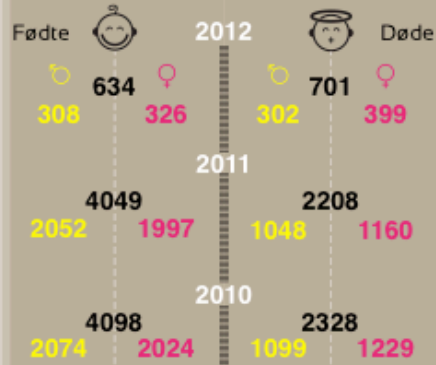
Summer 2012



English: 3.3 Million

Map: Jame

Fakta



Byens billeder



Byens stemmer

- 13.19_Polar bear occupies roof on Shell station
- 13.02_Jazzet til festival på Klosterortvet
- 12.46_Media architecture biennale #Aarhus
- 14.04: Bruuns bro lukket for trafik
- 13.33: Aktivister kraviede rundt på shell tank
- 12.59: AGF snydt til sidst i premiere

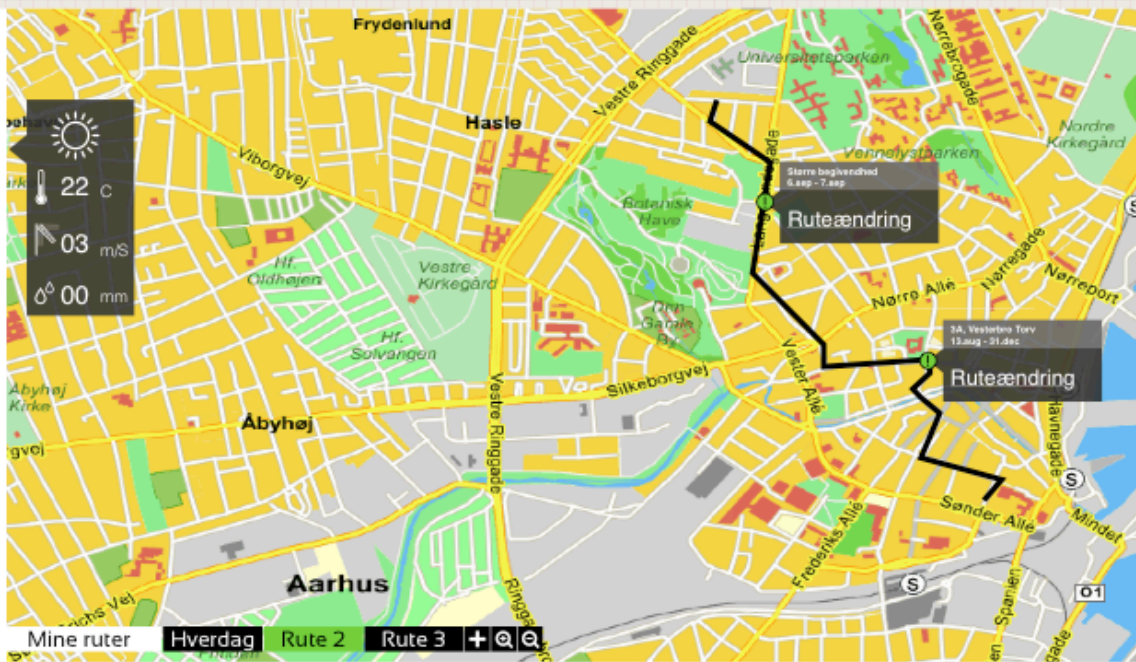
Byens sundhed



Data udbydere



your aarhus

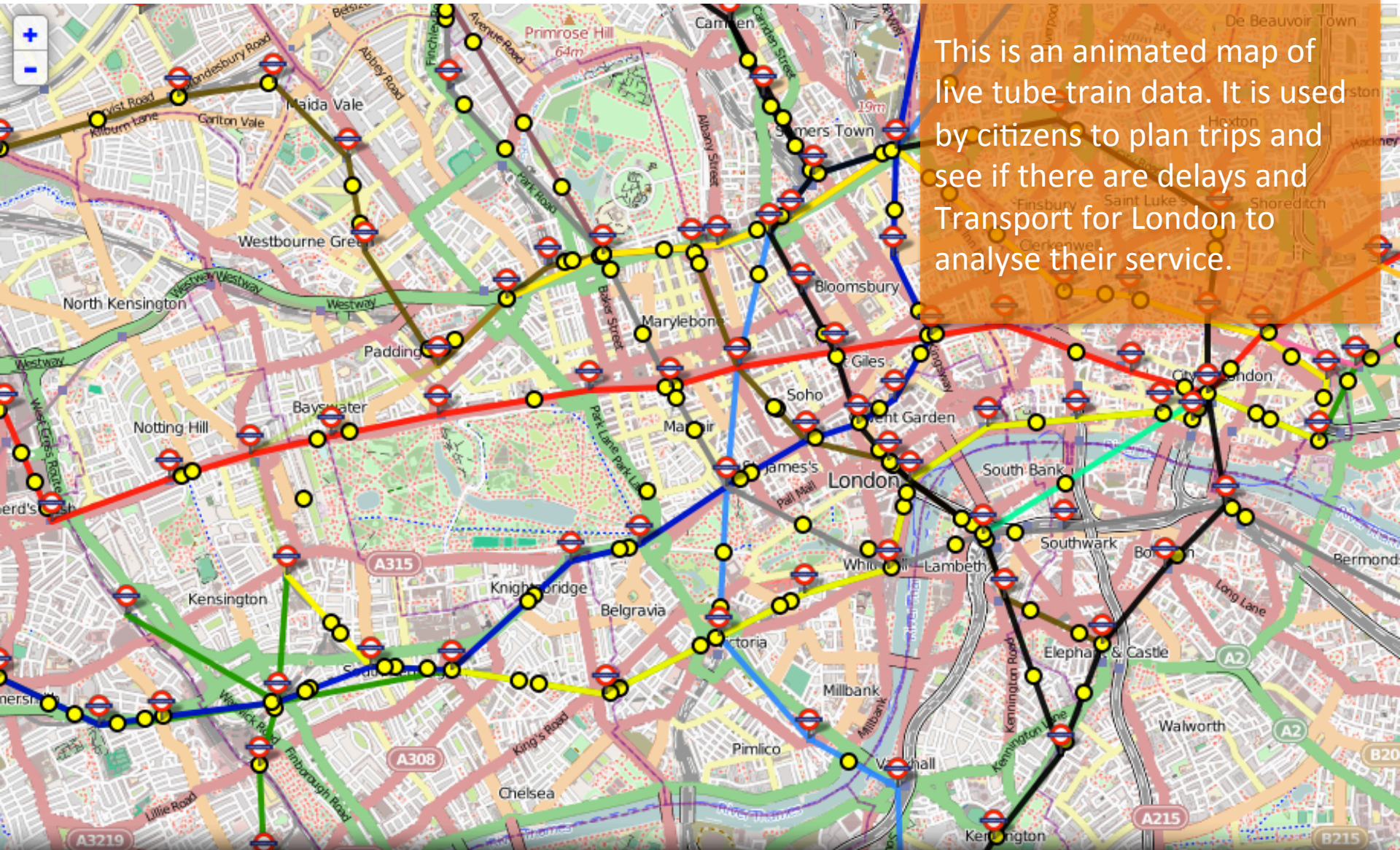


Wejr & klima



Transport

Station	Banegårdspladsen Aarhus	afg.
mod Viborg st		om 2 min.
Re mod Esbjerg st		om 8 min.
Re mod Hornslet st		om 15 min.
L mod Odder st		om 16 min.
ICL mod Aalborg st		om 19 min.



Live train map for the London Underground, by Matthew Somerville

Data collected: Tue, 20 Aug 2013 10:22:04 +0100

Q Søg efter datasæt

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MIDTJYLLAND



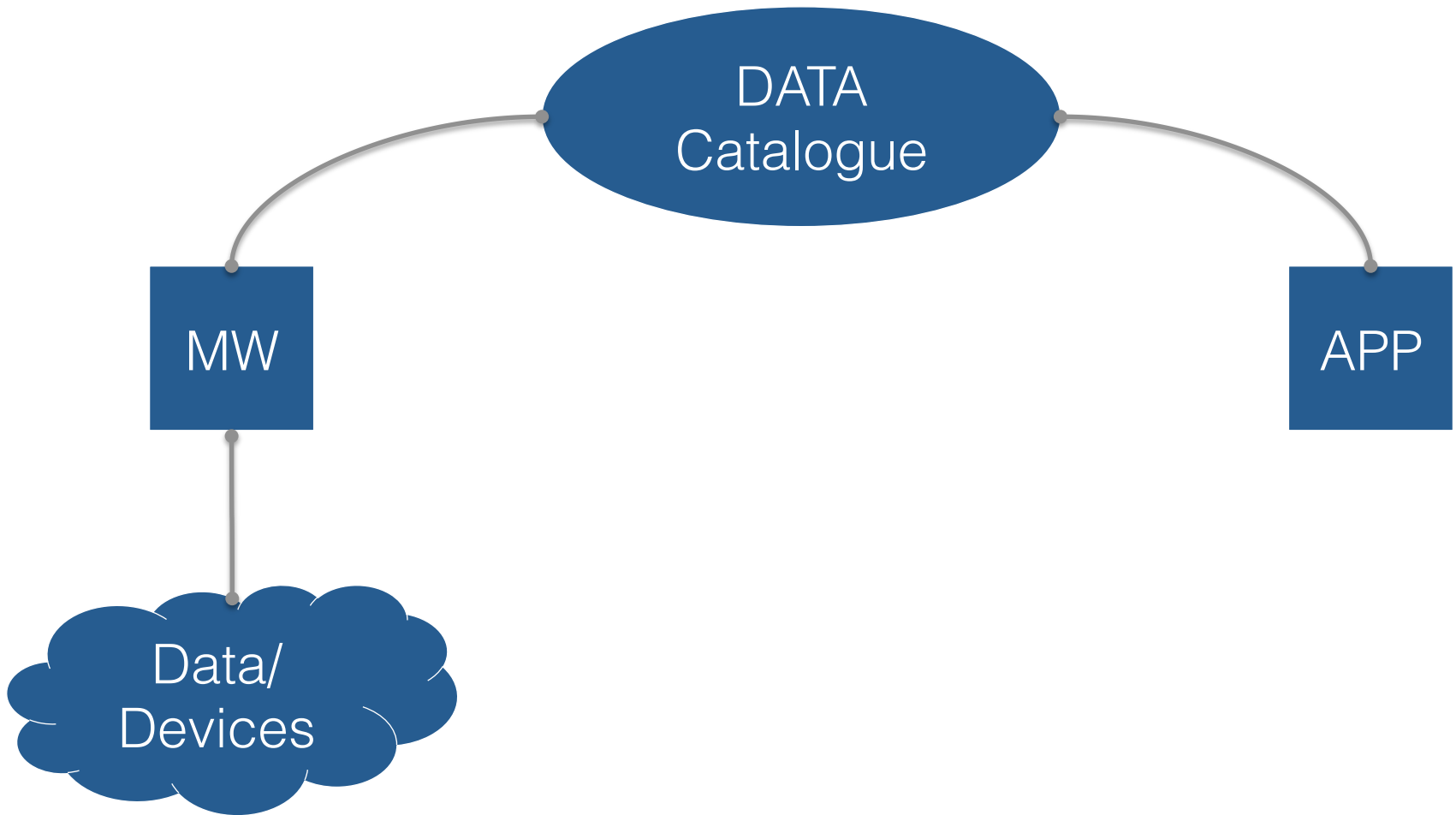
NOMINERET
ÅRETS SMART CITY-PRIS 2013

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Aarhus
Danish for progress

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GateSense



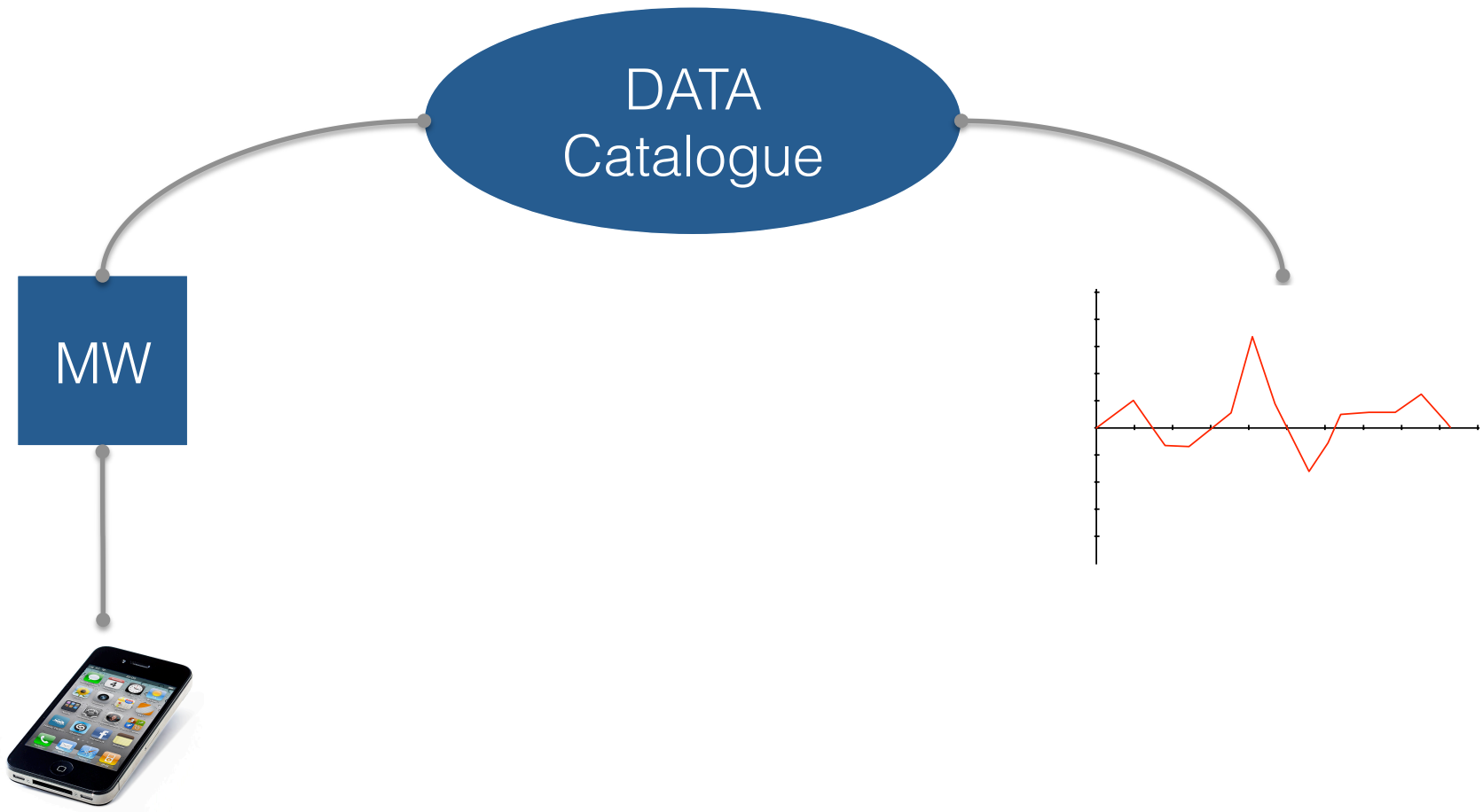
Is it that simple? Yes it is!

tiny.cc/xxw73w

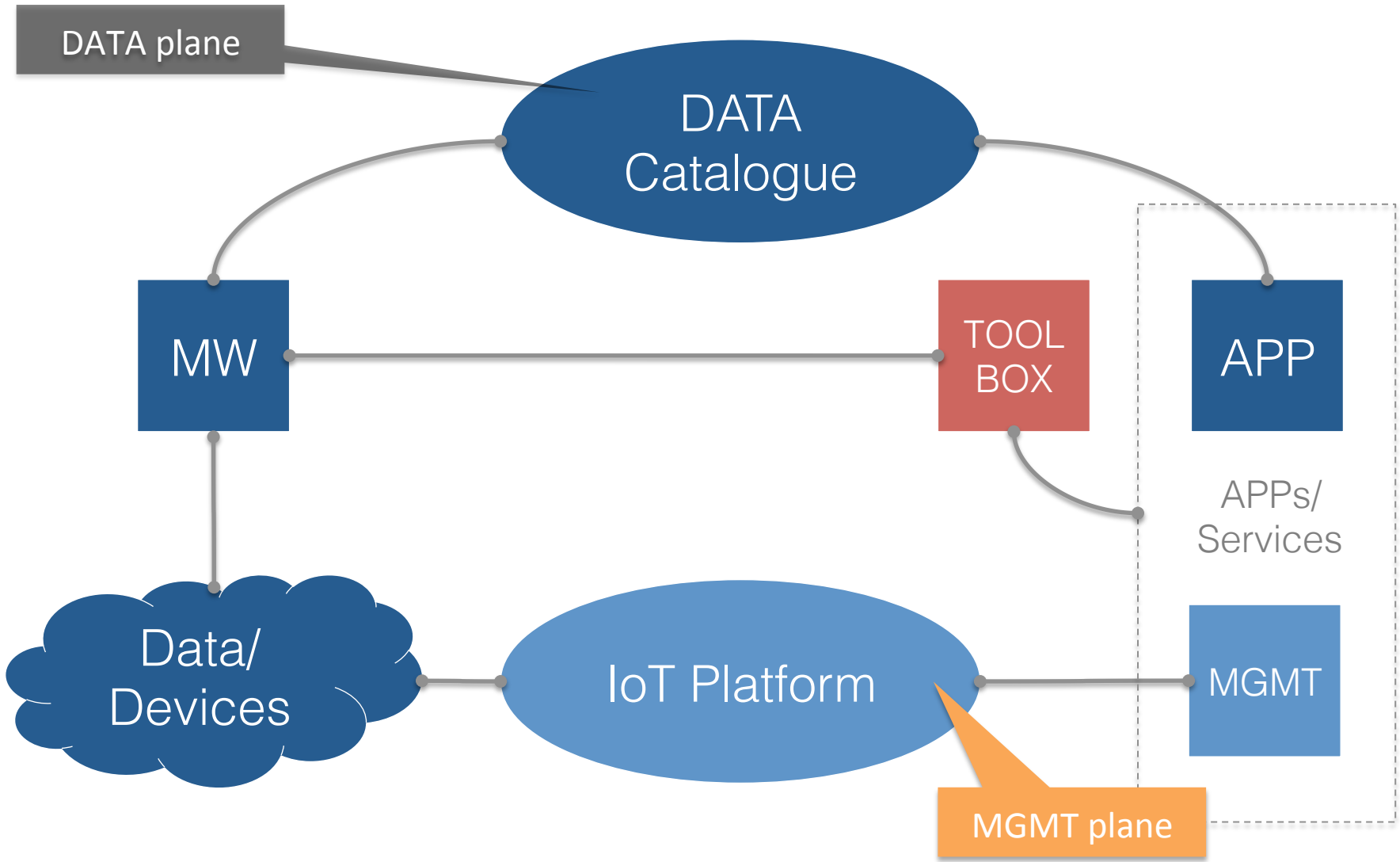
[WHO IS JOINING?](#)

[DATASET](#) [GRAPH](#)

GateSense



GateSense



We are currently developing a new internationally spanning Internet of things platform (Gatesense) that aims at being THE generic hub for data. In developing Gatesense, we are working in areas such as sensor discovery, big data, data streams, and real time data analytics. In the development process, we need two student developers, that have a broad programmatically understanding and an open mind. We are working with a variety of technologies, and we are using SCRUM as the development framework.

We promise you a diverse and agile working environment, with a large amount of freedom. We are project driven, which means that we develop our platform through the immediate projects, and therefore we are living in a highly dynamic world. This means that two days are never alike, and we are working in a lot of different areas.

What we expect from you is, that you are able to switch between tasks depending on the immediate needs, you are a team player, you are fluent in English, and have experience with the majority of the following technologies: **Java, C, Arduino, HTML, CSS, Javascript, PHP, Python**. Relevant but not mandatory experience: **Apache Camel, Drupal, CKAN, Raspberry Pi**. Finally, we are physically located in the **Aarhus** department of the Alexandra Institute, and we are expecting the weekly workload to be **15-20 hours**.

Send application to lasse.vestergaard@alexandra.dk October 4 at the latest.

We are looking forward to hear from you.

IoT•Forum

ity Pulse

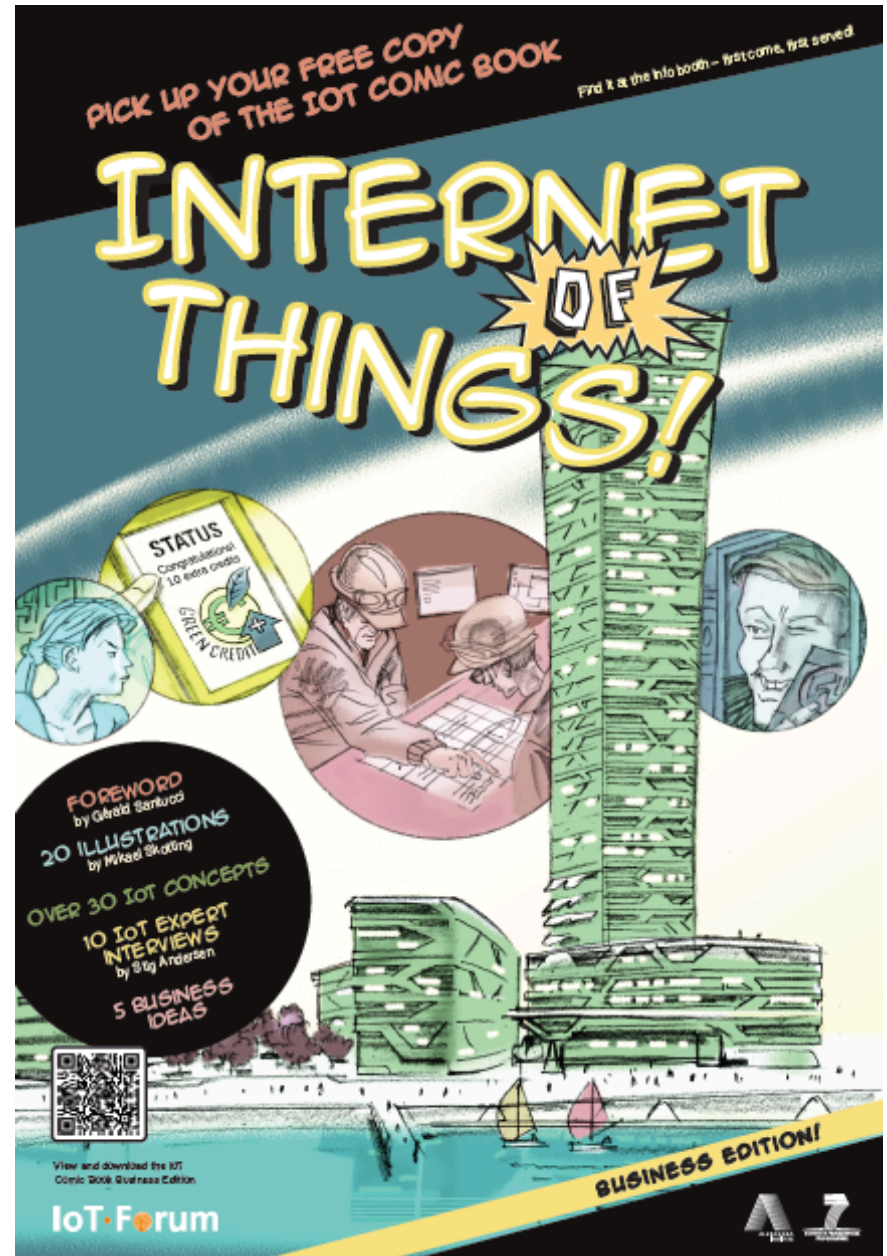


URBGRADE



IoT Lab

Gatesense



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Smart City Lab
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