



Smart Cities Are they around the corner?

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@rossdakin

February 8, 2017



A thin vertical black line is positioned to the left of the text, extending from the top of the text block to the bottom.

Decentralization of Silicon Valley

SAN FRANCISCO

SACRAMENTO

OAKLAND

opensys

SEMICON
July 11 - 13 West 2017

splunk
www.splunk.com

HITACHI
Inspire the Next
www.hitachi-america.us

Verific
www.verific.com

LinkSV
Link Silicon Valley
Connecting People
Capital and Companies
To the
Future

SILICON MAPS

WALNUT CREEK

SAN RAMON

CallidusCloud
www.calliduscloud.com

CENTRAL COMPUTERS
THE TECH STORE
www.centralcomputers.com

OGIS
International
www.ogis-international.com

KS Solutions
www.ks-sol.com

SAN MATEO
NIKKO SYSTEMS SOLUTIONS, LTD.
www.nksol.co.jp

OPENTEXT
www.opentext.com

QUALYS
www.qualys.com

ASAHI
www.asahieng.co.jp

MDC
www.mdcvacuum.com

Advanced Thermal
Sciences
www.atschiller.com

CENTRAL COMPUTERS
THE TECH STORE
www.centralcomputers.com

ORACLE
www.oracle.com

CENTRAL COMPUTERS
THE TECH STORE
www.centralcomputers.com

AIR LIQUIDE
ELECTRONICS
www.electronics-airliquide.com

OPLINK
a moxley company
www.oplink.com

hp
www.hp.com

REDWOOD CITY

YAHOO!

SONY
www.sony.com

FREMONT

PALO ALTO

Google

facebook
www.facebook.com

NETRONOME
www.netronome.com

sgi
www.sgi.com

Fuji Electric
www.america.fujielectric.com

China Silicon Valley
美中硅谷协会
www.chinasv.org

TRUSTNET
www.trustnet.com.mx

LinkedIn

101VOICE
www.101VOICE.com

GLOBALFOUNDRIES
www.globalfoundries.com

PHOTRONICS
www.photronics.com

moxley
www.moxley.com

GUZIK
Technical Enterprises
www.guzik.com

Carnegie Mellon University
Silicon Valley
sv.cmu.edu

MANAGEMENT
PLAN | DEPLOY | MANAGE
www.ITMGMT.com

GLOBALFOUNDRIES

YAMAICHI
ELECTRONICS
www.yeu.com

WE
WÜRTH ELEKTRONIK
www.we-online.com

MOUNTAIN VIEW

DELPHI
Innovation for the Real World

DESIGN CON
2017
Jan. 31 - Feb. 2, 2017
DesignCon.com/trap

CISCO
www.cisco.com

ChipMOS
www.chipmos.com

ANALOG
DEVICES
www.analog.com

ZOLLNER
www.zollner-electronics.com

MILPITAS

SLAC ACCELERATOR

CoAdna
Smart Photonics

ALPHA & OMEGA
www.alpha-omega.com

Aviat
www.aviatnetworks.com

HNL
Waveguide
Systems &
Components
www.hnlinc.com

SK hynix
www.skhynix.com

Canon
www.usa.canon.com

altierre
www.altierre.com

BECKHOFF

SILICON VALLEY



KWE
www.kwe.com

JIT
www.jit.com

San Francisco

adax

Oakland

Concord

CENTRAL COMPUTERS
RIVERBED

HITACHI

princeton

MIPOX

Silicon Maps

DSA

KSI

ULTRA

Check Point

San

San Mateo

Foster City

Hayward

BIT

FIS

WINTEC

DETECON

VISTO

OPENWAVE

SMART

NewSoft

DEM

SMART

C3-Ilex

GLOBAL

Palo Alto

OGIS

FOX

SanDisk

PIXIM

ARM

NetApp

agere

RAE

ANALOG DEVICES

phoenix

tak

Studley

GUZIK

HALO

Juniper

AMCC STORAGE

NetD

NetD

RAE

ANALOG DEVICES

phoenix

tak

hp

TIBCO

Microsoft

Microsoft

Microsoft

Microsoft

Microsoft

Microsoft

Microsoft

Microsoft

Microsoft

Microsoft

CAVILUM NETWORKS

DITECH

FOUNDRY

FOUNDRY

FOUNDRY

FOUNDRY

FOUNDRY

FOUNDRY

FOUNDRY

FOUNDRY

FOUNDRY

FOUNDRY

Sunnyvale

UTEC

VaSt

SPREAD TRON

FAREBOR

BSP

TOSHIBA

HNL

TROR

ST

SANYO

PHILIPS

YAMATAKE

FUJITSU

KASHIYAMA

HITACHI

HITACHI

Signetics

amdocs

SMIC

SANYO

PHILIPS

ZERAN

UMC

DNP

SHIMADZU

CDS

TECIDA

Infineon

SANYO

PHILIPS

Lead Moon Arts

Bay Area Internet Solutions

Wolfe Engineering

San Jose

San Jose

San Jose

San Jose

San Jose

San Jose

San Jose

San Jose

San Jose

GESS

CENTRAL COMPUTERS

Yosemite Technologies

ROAMWARE

ROAMWARE

ROAMWARE

ROAMWARE

ROAMWARE

ROAMWARE

ROAMWARE

ROAMWARE

ROAMWARE

TRANSERA

Borland

DEVICE

MIRASA

sanaz

IPextreme

XILINX

HITACHI

HITACHI

HITACHI

HITACHI

HITACHI

PLANTRONICS

RICOH

ONStar

HRS

TRESTRIA

IBM

s v probe

Morgan Hill

Morgan Hill

Morgan Hill

Morgan Hill

Morgan Hill

Los Gatos

FAMTECH

IBM

s v probe

Morgan Hill

Morgan Hill

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IBM

s v probe

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IBM

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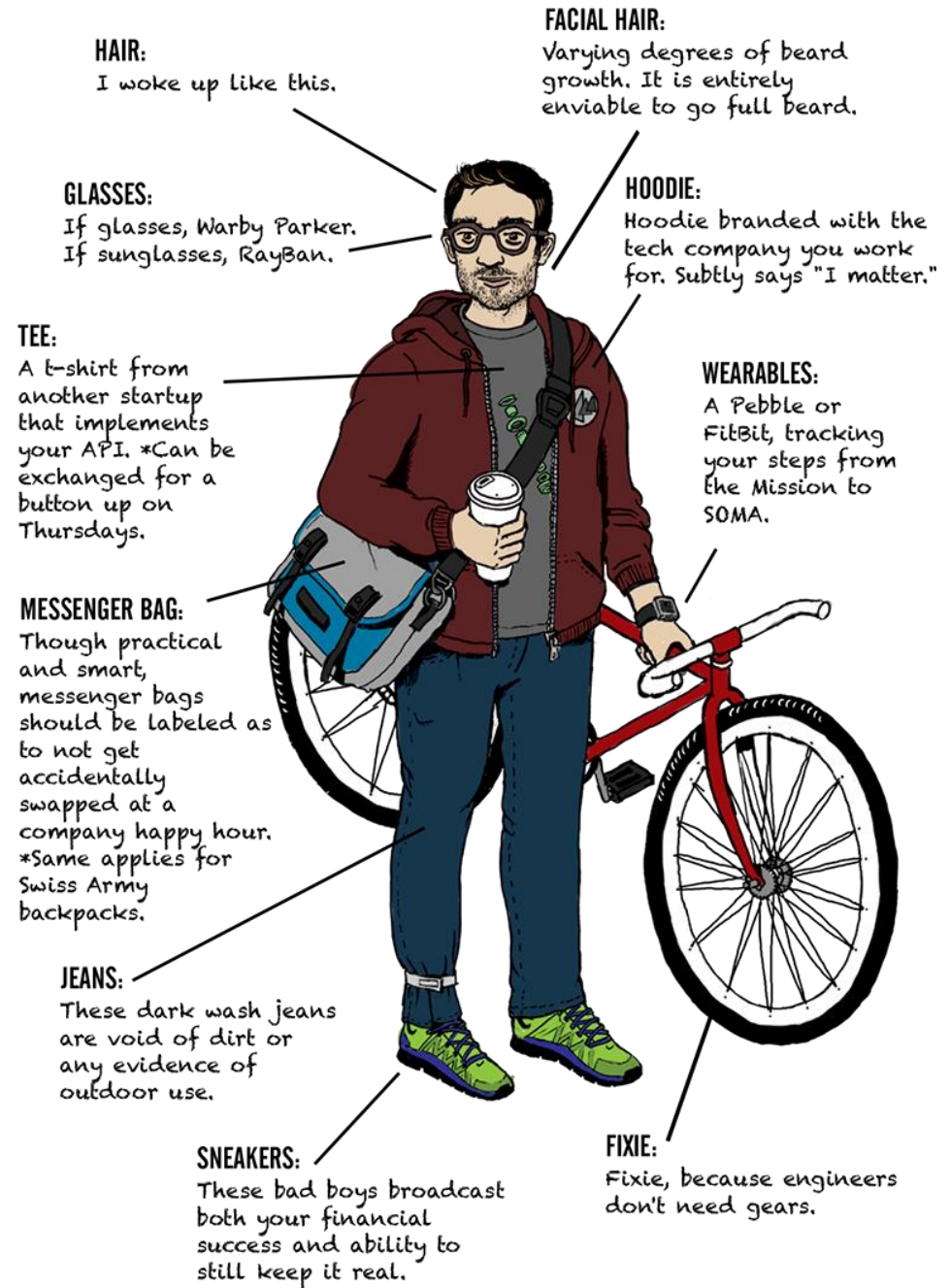
Morgan Hill

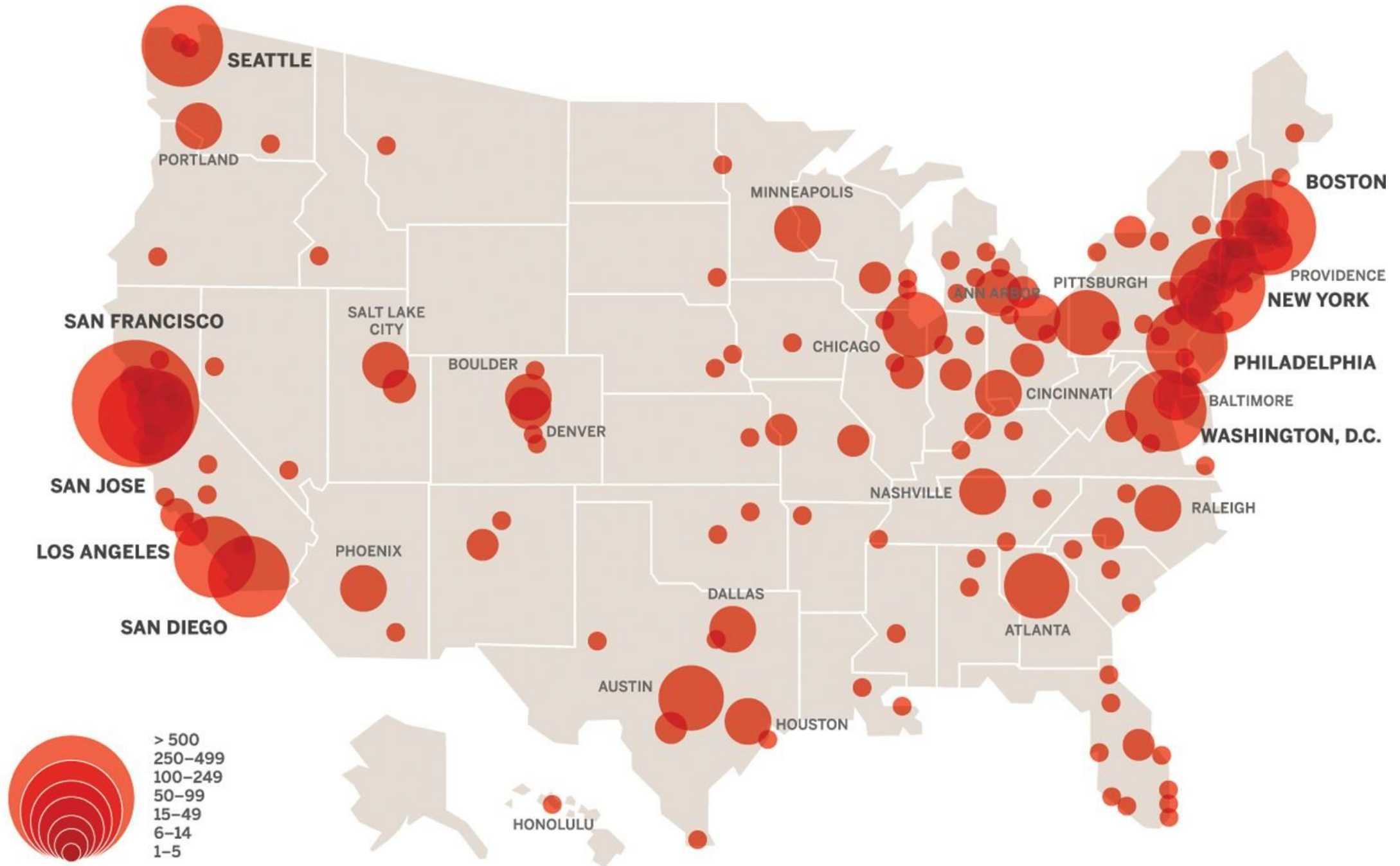
Morgan Hill

Morgan Hill

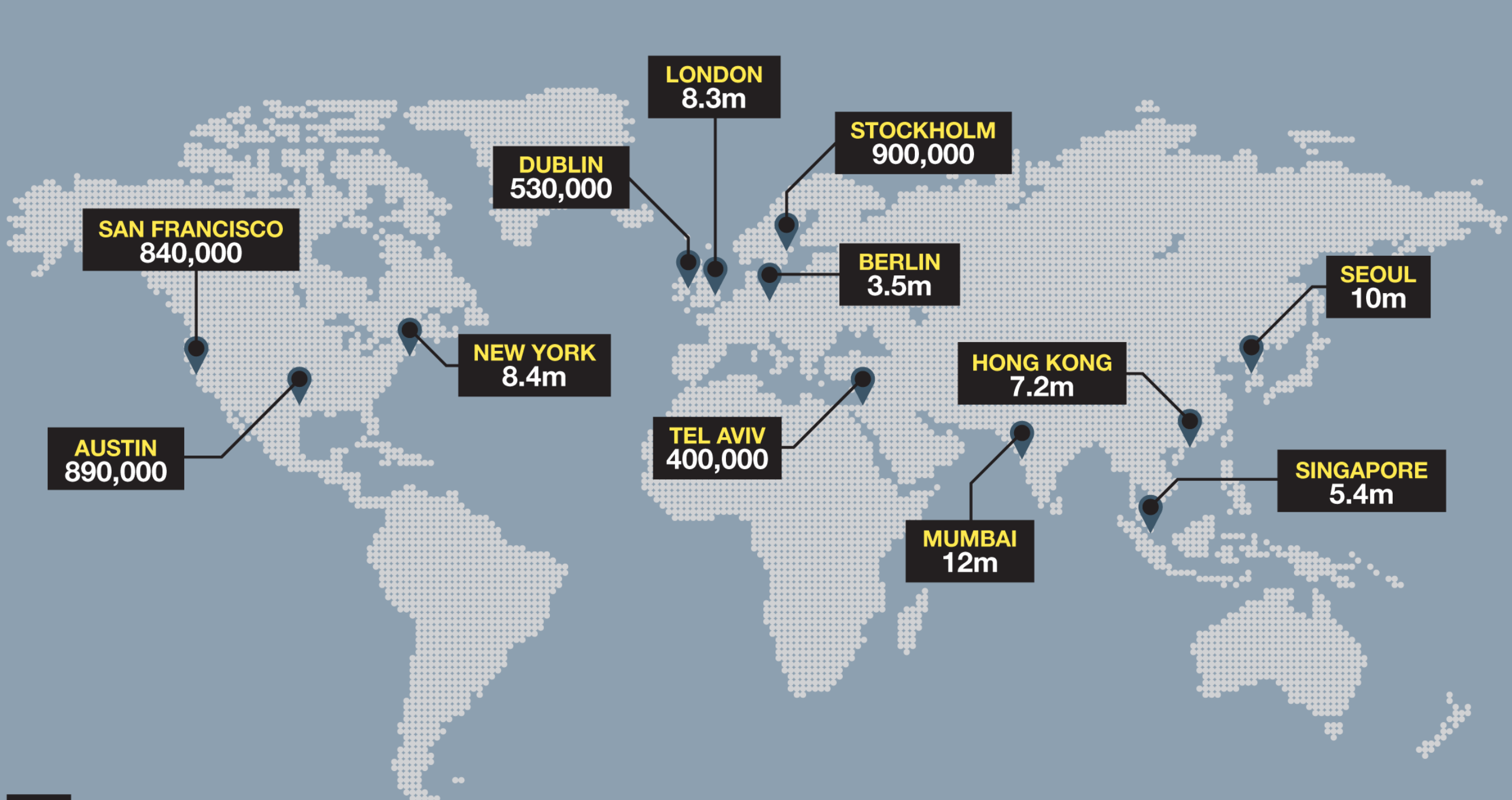
Morgan Hill

The Tech Uniform









SAN FRANCISCO
840,000

DUBLIN
530,000

LONDON
8.3m

STOCKHOLM
900,000

BERLIN
3.5m

SEOUL
10m

NEW YORK
8.4m

HONG KONG
7.2m

AUSTIN
890,000

TEL AVIV
400,000

SINGAPORE
5.4m

MUMBAI
12m

Xm = population

Source: Savills World Research



Pied Piper

pied piper

NEVER
FORGET







The Declaration of Sentiments JULY 19-20 1848

When in the course of human events, it becomes necessary by one portion of the family of man to assume among the people of the earth a position different from that which their former situation has placed them in, and when a long train of abuses and usurpations, pursuing invariably the same object, evinces a design to reduce them to absolute despotism, it is their right, it is their duty, to throw off such government, to reject its authority, and to institute new government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to insure their safety and happiness. Prudence, indeed, dictates in these cases that the sense of the injustice should first be made to feel in the minds of the people, and that they are disposed by their Creator with certain inalienable rights, that among these are life, liberty and the pursuit of happiness. That to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed. Whenever in any government a long train of abuses and usurpations, pursuing invariably the same object, evinces a design to reduce them to absolute despotism, it is their right, it is their duty, to throw off such government, to reject its authority, and to institute new government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to insure their safety and happiness.



Democratization of Resources

Education

devbootcamp



coursera



Education

Tel Aviv University ranked among world's top startup schools

February 6, 2017 10:59am

1 SHARE



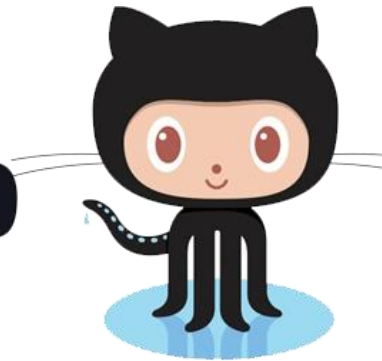
Tel Aviv University (Wikimedia Commons)

(JTA) — A new [study](#) ranked Tel Aviv University among the top schools producing billion-dollar startups.

Tools



GitHub



Google Cloud Platform



Tools

NAVIGATOR

The City Obsessed With Dogs Made an App Just for Them

It was only a matter of time before a canine-friendly app sprung up Tel Aviv.

LINDA POON | [@linpoonsays](#) | 3:24 PM ET | [Comments](#)



Kfir Bolotin/City of Tel Aviv

Capital / Accelerators



Why is this
good?

- Opportunity

Why is this
good?

- Opportunity
- Diversity

Why is this
good?

- Opportunity
- Diversity
- **Specificity**



Not just smart cities —
your smart city.



Human Centered Design (HCD)







Computer History Museum

Google

California 6WRE5

APR California 2015 6VVA094 dmv.ca.gov

RX450h

Google

self-driving car

Google

self-driving car



Computer
History
Museum

Google

6VVA

Google

self-driving car

APR California 2015
6VVA094
dmv.ca.gov

RX 450h

Google

self-driving car

Agriculture

A wide-angle photograph of a large indoor greenhouse. The structure is a long, arched tunnel covered in translucent plastic. The interior is filled with rows of strawberry plants growing in black plastic mulch. The plants are lush green with some white flowers and small red strawberries. A central aisle leads towards the far end of the tunnel where a person is visible. The lighting is bright, coming from the translucent roof.

Agrilyst is the intelligence platform for indoor farms.



hCrunch

DISRUPT

hCrunch

TechCrunch

DISRUPT

TechCrunch



New 'Thinking Soil' Fixes Concrete Foundations Using Engineered Bacteria

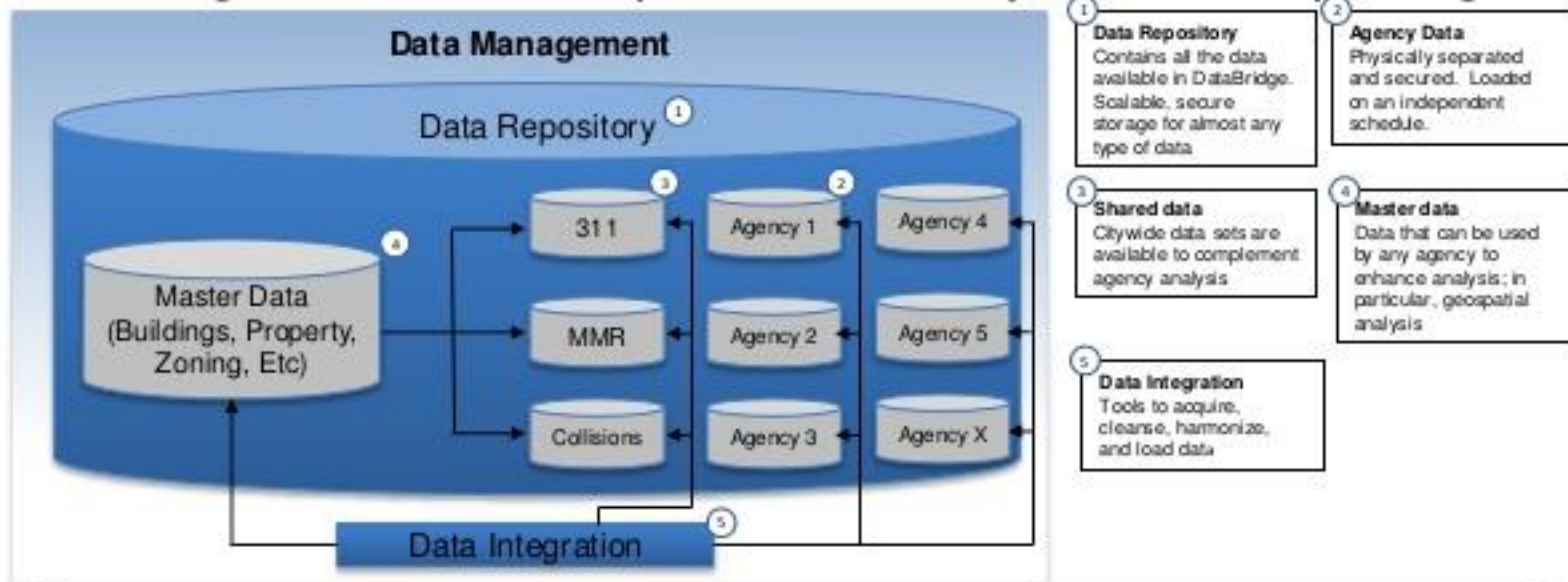
Health & Safety

VisionZero



What is DataBridge?

DataBridge is a citywide platform that facilitates data sharing, storage, and use for operations, analytics, and reporting.



DataBridge leverages existing data systems to give analysts, inspectors, program managers, . . . , first responders information and tools to do their jobs most effectively.

Energy



Education



Logistics

SOURCE: OTTO



Bloomberg

deliv

The logo features the word "deliv" in a dark grey, lowercase, sans-serif font. The letter 'i' is replaced by a stylized orange shopping cart. The cart's body is a thick orange bar that curves upwards at the left end and tapers to the right. Below the cart body are two solid orange circles representing wheels. The top of the 'i' is a thick orange bar that curves downwards and to the right, ending in a rounded tip.

But, what about drones?



Accessibility

10
NYC



COMPANIES BUILDING SMARTER CITIES

PARKING



DATA-DRIVEN URBAN PLANNING



WASTE MANAGEMENT



ENVIRONMENTAL/LOCATION SENSORS



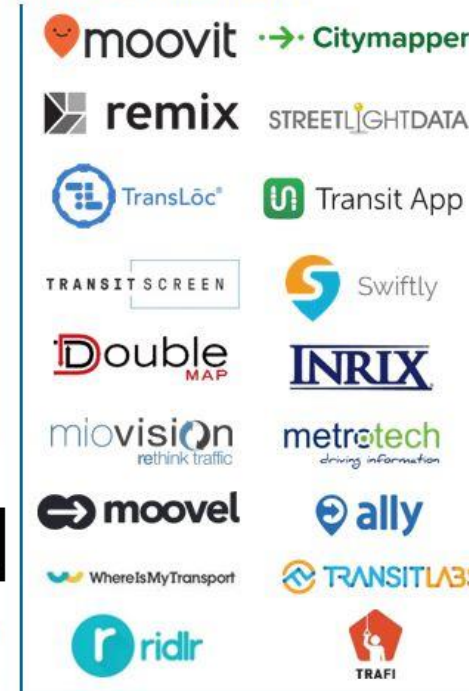
WATER SOFTWARE & ANALYTICS



DISASTER MANAGEMENT



TRANSPORT/TRANSIT DATA



SMART TRANSPORT (SHUTTLE/BIKE)



CONNECTIVITY



GRID/ENERGY



CBINSIGHTS

<https://www.cbinsights.com/blog/iot-smart-cities-market-map-company-list/>

The City Resilience
Framework

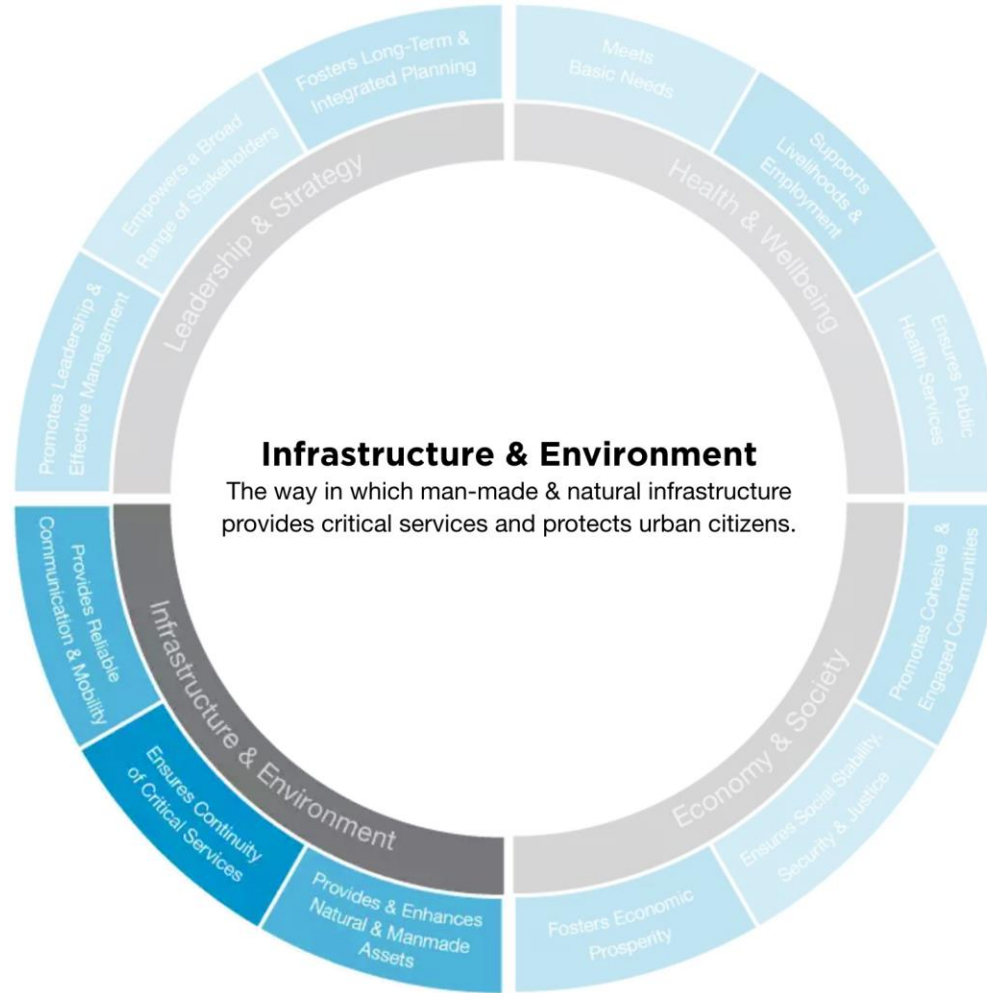
Assessment



100resilientcities.org/resilience



100resilientcities.org/resilience



100resilientcities.org/resilience



100resilientcities.org/resilience



Difficulties

Policy, legislation

- When AI is at fault
- Incentives / subsidies
- Permissible evidence (Amazon Alexa)



Ethical

- Discrimination (predictive policing)
- Displacement (automation, UBI)



Summary

- Cities are important
- Diversity matters
- It's about more than drones
- It's about more than technology
- **Please work on things that matter**



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Ross Dakin

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February 8, 2017

