

Forensics, R, Social Impact

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January 2020

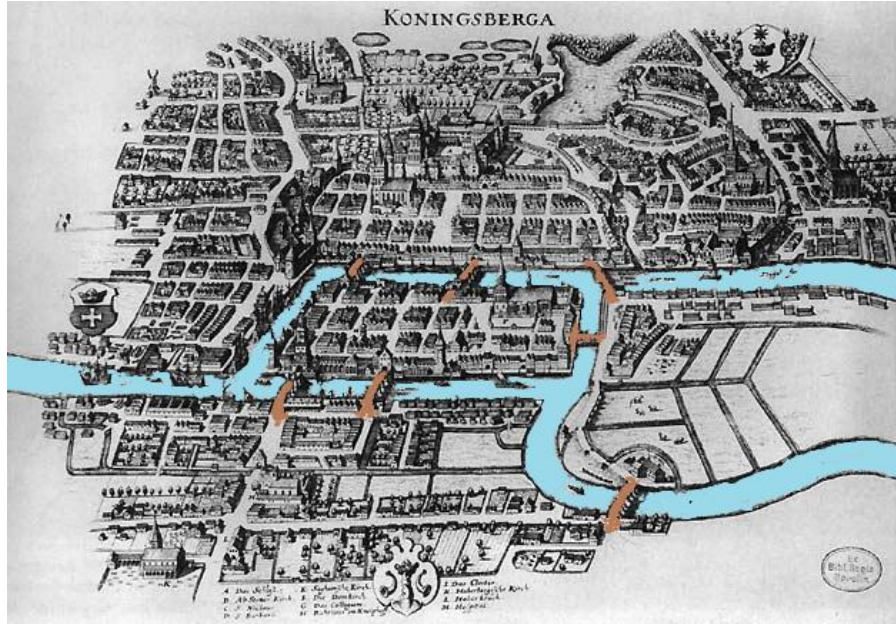
Agenda

- Troglodyte Conspiracy Detection using Networks
- Demonstration: Graph Libraries on R
- What I Do Now: Social Impact

A person in a light-colored suit and tie is giving a thumbs up gesture. The image is faded and serves as a background for the title.

Graph Analysis on R

Euler and the Bridges of Koenigsberg

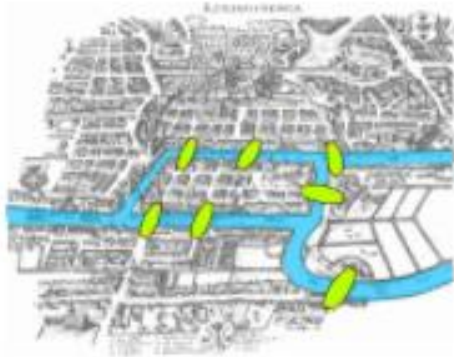


Problem: devise a walk through the city that would cross each of those bridges once and only once.

Leonard Euler (1736) mathematically proved that there was no solution.

But in so doing he invented graph theory.

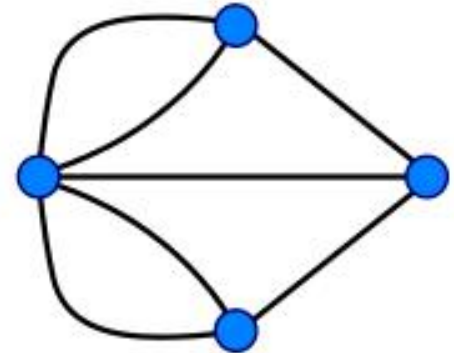
Euler and the Bridges of Koenigsberg



Routes inside the
land masses are
irrelevant



What matters are
the connections
between the land
masses



Bridges formed the
concept of nodes
and edges

Graph Analysis 101

- 2 Datasets: Nodes and edges
- Building the network and visualization
- Detecting communities (Spin-Glass/Modularity)
- Repository:
<https://github.com/docligot/conspiracy-detection-r>



What Do I Do Today: Social Impact

Competitions: Social Impact



Break The Fake ASEAN
Hackathon



NASA International
Space Apps Challenge



UA&P

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DOST to train 30K people on data science, analytics

11, 2019, 5:05 pm

and Technology (DOST), in
y of the Philippines (DAP), will
d analytics, its chief said on

to dela Peña said the program
et of PHP50.84 million.

million was allocated.

is training to build competency
dding that the DOST and DAP
ek.

h Data Analytics R&D, Training
pe done online, according to

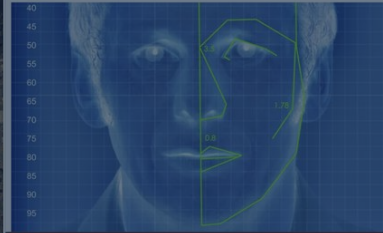


PROJECT 'SPARTA': DAP President Engelbert Caronan Jr., (left) and DOST Secretary Fortunato dela Peña (right) shake hands after the signing of a memorandum of agreement for the training of 30,000 individuals on data science and analytics on Tuesday (Nov. 5, 2019).



New AI can guess whether you're gay or straight from a photograph

An algorithm deduced the sexuality of people on a dating site with up to 91% accuracy, raising tricky ethical questions



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Privacy

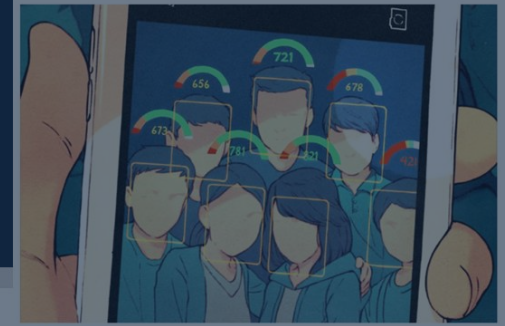
The odd reality of life under China's all-seeing credit score system

Looking for love? In China, a good credit score could get you access to exclusive singles

INTERNATIONAL INDIA PAKISTAN PHILIPPINES REST OF ASIA EUROPE AMERICAS AFRICA OTHERS

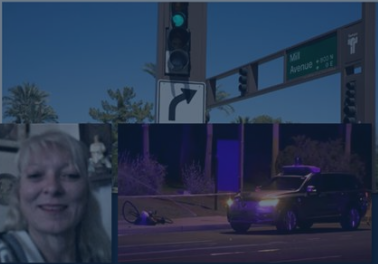
Driver follows GPS, plunges vehicle into lake

Web Report/Vermont
Filed on January 28, 2018



Credit Kevin Hong

Self-Driving Uber Car Kills Pedestrian in Arizona, Where Robots Roam



Waze app directions take woman to wrong Brazil address, where she is killed

By Shantia D'Souza
Updated on Jan 28, 2018

News 100

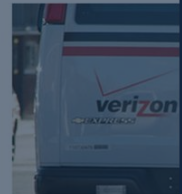


Verizon Tells Customers Subpoena For Itemized Judge Disagrees

7.14.11
12:15 PM EDT

By Chris Morran
[@themorrancave](#)

PHONE BILLS VERIZON
SMALL VICTORIES
WILLOW GROVE RULES



(TeachingThomas)

attorney, she finally got



BUSINESS INSIDER

Parole And Technology: Prison Breakthrough

The Economist Apr. 12, 2014, 7:25 PM

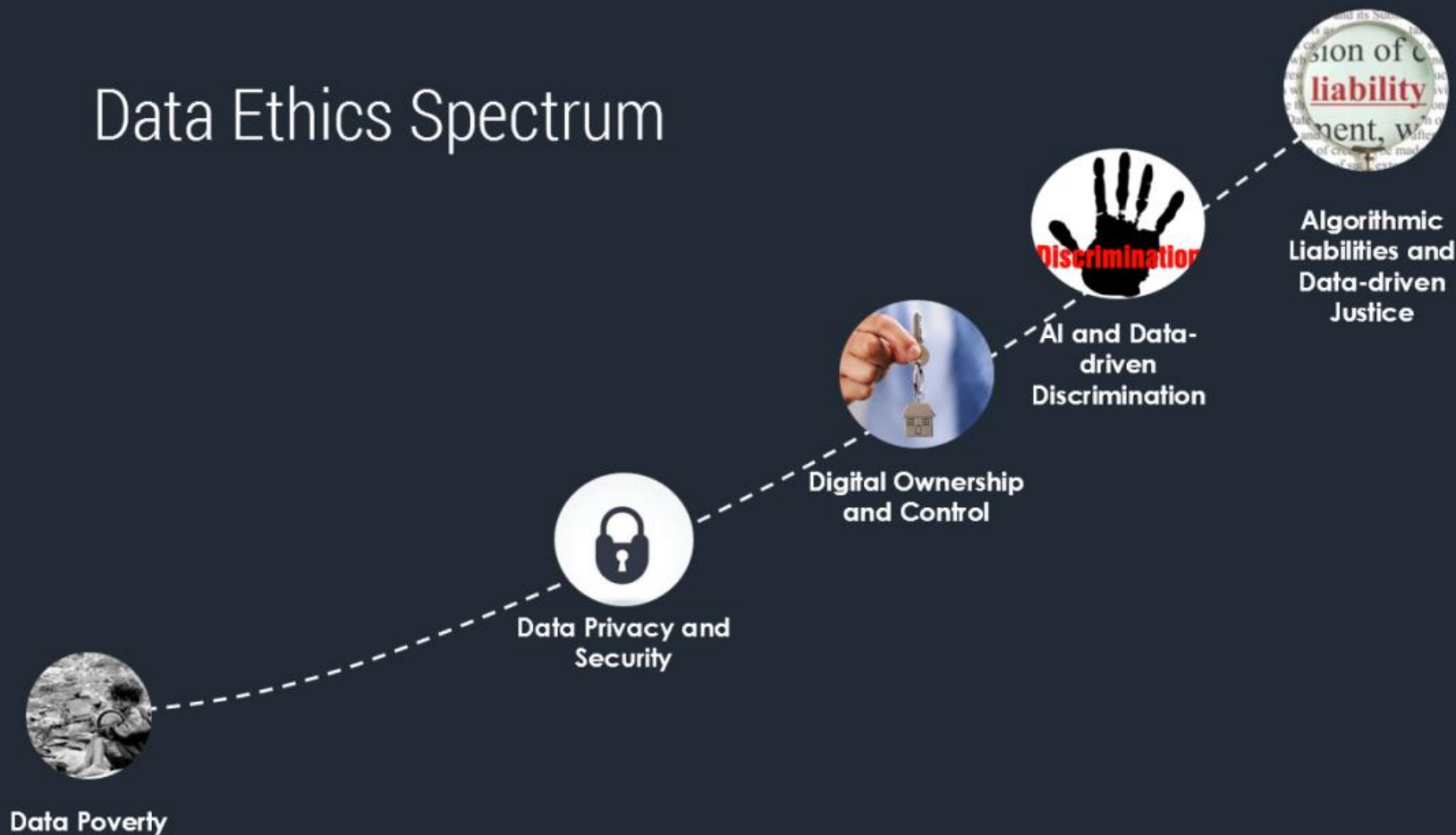
Big data can help states decide whom to release from prison

IN MONTY PYTHON'S "Life of Brian", the Jerusalem crowd picks wrongdoers for Pontius Pilate to release according to whether their names begin with "r", since they find it amusing that the Roman governor



This Tuesday, July 3, 2012 photo shows the interior of a cell at the maximum-security Mount Olive Correctional Center in Mount Olive, W.Va. AP Photo

Data Ethics Spectrum



OPEN BANGSAMORO

Open Data for the Transition
from the ARMM to the BARMM

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https://www.wix.com/lpviral/enviral?utm_campaign=vir_wixad_live&adsVersion...

With the Open Bangsamoro Dataset, we envision a geospatial analysis platform optimized to help humanitarian organizations and local government units in BARMM make smarter, more evidence-based decisions.

As a proof-of-concept, we present our solution as a system consisting of two main components:

1. Interactive dashboard that shows relevant information and important insights for decision-makers
2. AI-generated maps to augment official statistics and optimal facility placement schemes to aid development plans in BARMM

Mindanao is the most seismically active major island in the Philippines. This study investigates how ARMM is (and will be) affected by earthquakes. I'll start by showing major historical earthquakes and their respective locations all throughout ARMM. Then I'll show which cities, road networks and seaports most susceptible to damage from earthquakes and tsunamis, and which ones aren't. I'll tie the analysis and visuals together through an online interactive and animated web application for ease of exploration, tracking and discovery.

Previous studies show that BARMM has a higher than average student dropout rate in the country. At the primary level, boys tend to leave school which eventually leads to worsening gender disparities as students get promoted to a higher level of education. It is reported that factors such as lack of interest and the rising cost of education make the students leave school. These can be further broken down by identifying indicators and key features that affect dropout rates such as early employment, security issues, and health care access among others.

A silhouette of a woman with her hair in a bun, seen from the side. She is holding her hands up to her face, framing a bright sunset or sunrise over a body of water. The scene is dimly lit, with the primary light source being the sun, which creates a strong backlight effect on her hands and the text.

Do what inspires you

Forensics, R, Social Impact

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