

Crystal Ball Gazing for Cyber Security

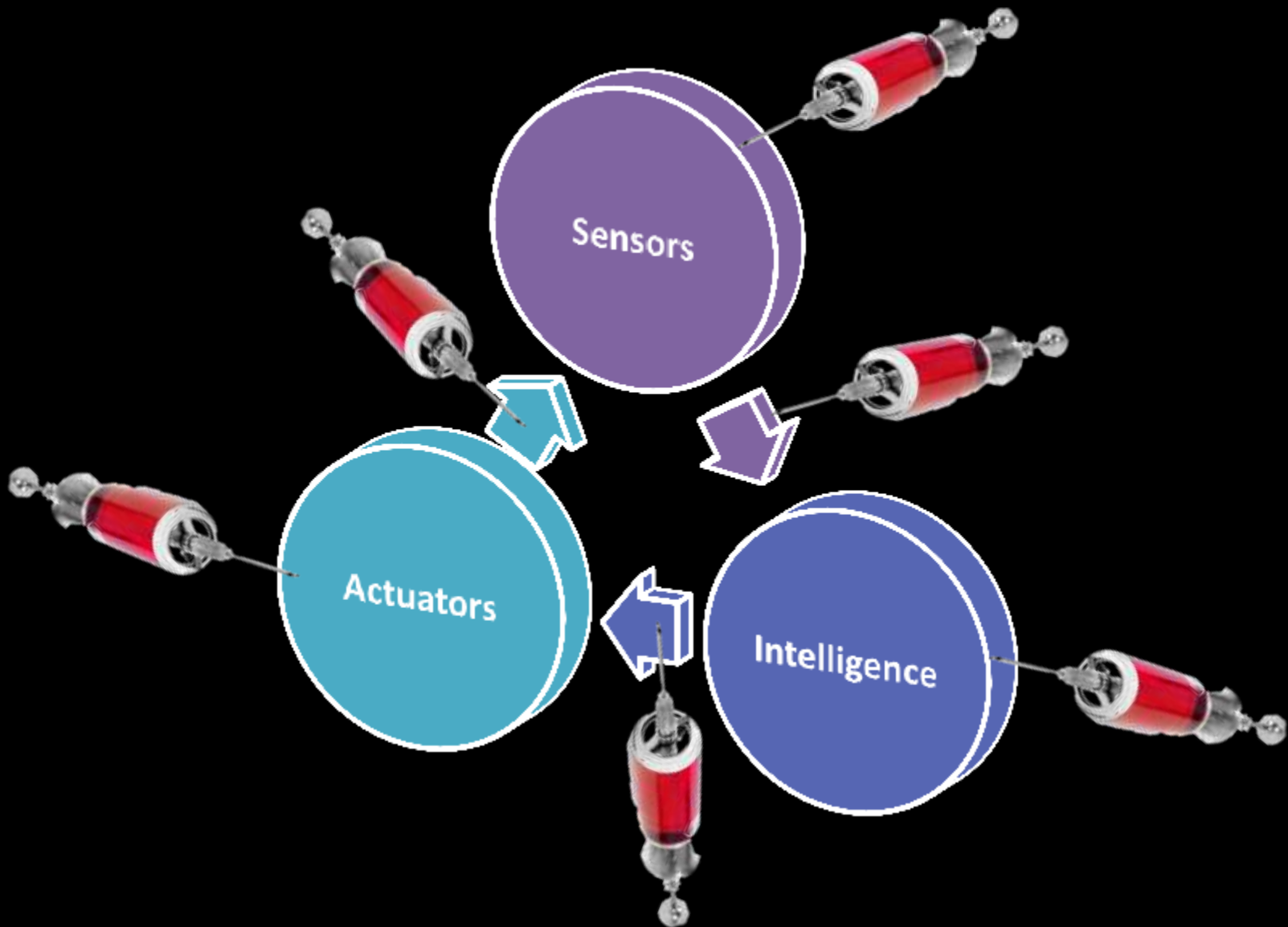
By Commander Mukesh Saini (Retd.)

- **Introduction**
- **Cyber Security Challenges in near future**
- **The Emerging Challenges**
 - **Social Media Engineering**
 - **Video morphing**
 - **Open Ledgers**
 - **AR- VR-MR**
- **Conclusion**

Cyber security challenges in near future

- **AI, Machine and Deep learning**
- **Cloud Technologies**
- **Endpoint Hardware Authentication**
- **Block chain**
- **Preventing Data Loss**
- **User Behaviour Analytics**

Think Differently



Security Challenges

- **Social Media Engineering**
- **Video morphing**
- **Open Ledgers**
- **AR- VR-MR**
- **Brain-machine interface**
- **Identification, authentication and tracking**
- **Quantum Computing**
- **Adaptive Network**
- **Convergence of Robotics, AI, ML, NLP & NN**
- **Non-IP networks**
- **Real-time Analytics & Predictive Analytics**
- **Adaptive trust protocols.**
- **Autonomous systems**
- **Internet of Bio- Nano - mechanical things**
- **IPv6 interception**
- **Non-IP networks**
- **Extra Sensory Organs**
- **Forensic of Things**

Security Challenges

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Social Media Engineering

What is a Nation?

By French Theorist Ernest Renan (1823-1892)

- **A nation is a large-scale solidarity, constituted by the feeling of the sacrifices that one has made in the past and of those that one is prepared to make in the future.**
- **The primary objective of a war is to impose will of own nation over other**

What if, tamper with the will of nation instead of winning over the will

- **Destroy collective memory of a society, because each individual mind is controlled and manoeuvred separately**
- **Fragmentation and reconsolidation of society**
- **Playing with psychology of whole country to undertake regime change**

Social Media Engineering

Read CA's latest press releases



Data drives all we do.

Cambridge Analytica uses data to change audience behavior. Visit our [Commercial](#) or [Political](#) divisions to see how we can help you.

Marriage for Power

Renaissance



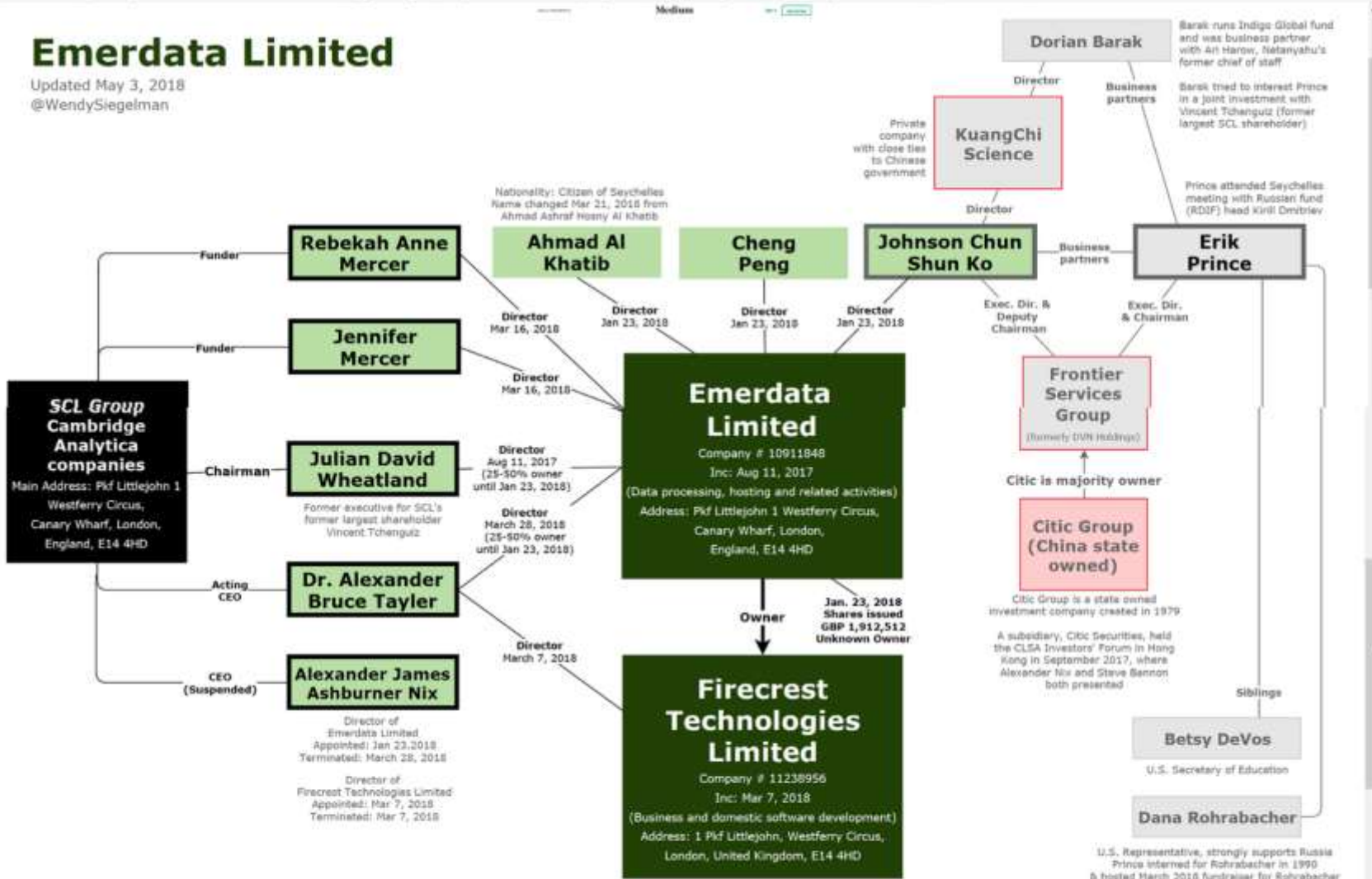
Cambridge Analytica

SCL

Emerdata – rebirth of CA

Emerdata Limited

Updated May 3, 2018
@WendySiegelman



Techniques

- **BIG5 personality profiling/ OCEAN**
 - Openness,
 - Conscientiousness,
 - Extraversion,
 - Agreeableness,
 - Neuroticism
- **Trait Prediction Engine**
- **BDA+ AI + NLP+ ML**
- **Real human journalists, political workers and bots**
- **Dynamic content in Darkweb**
- **Google Bombing**

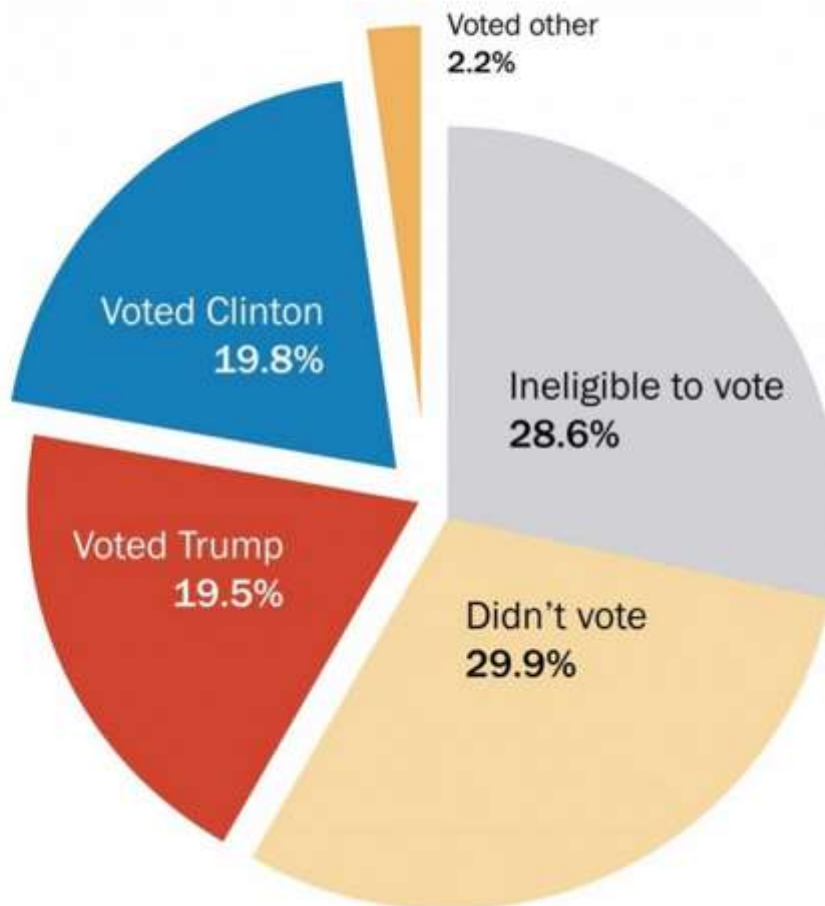
NOTA BUTTON

Cambridge Analytica worked on campaigns in several key states for a Republican political action committee. Its key objective, according to a memo the *Observer* has seen, was “voter disengagement” and “to persuade Democrat voters to stay at home”: a profoundly disquieting tactic. It has previously been claimed that suppression tactics were used in the campaign, but this document provides the first actual evidence.

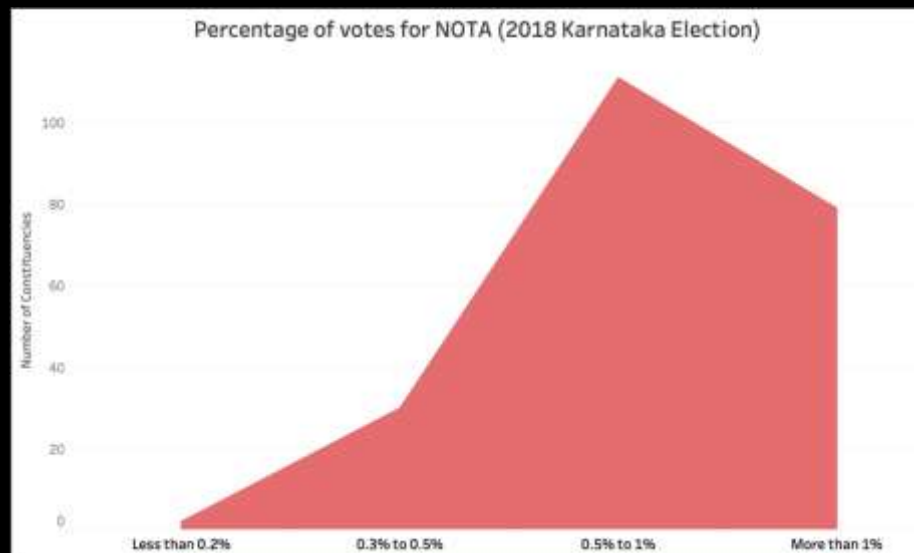
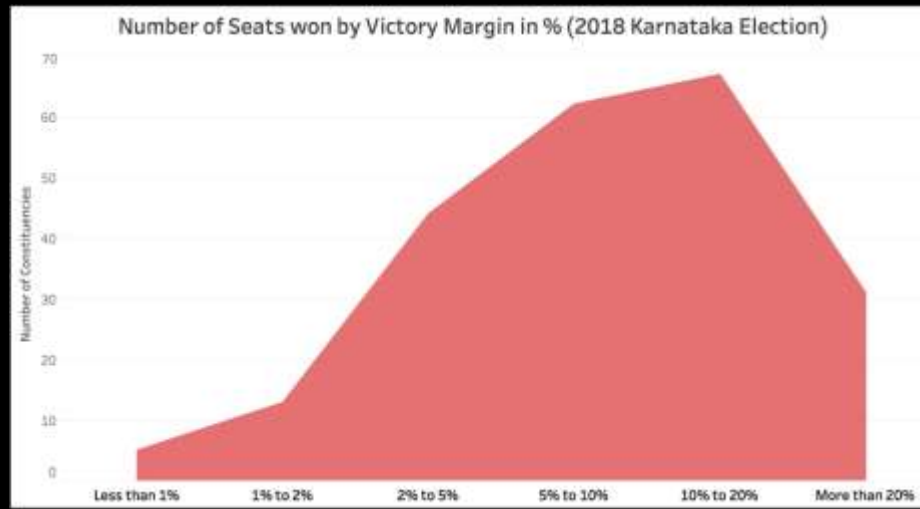
NOTA and US President

How America participated in the election

Data from U.S. Election Project, Dave Wasserman, Census Bureau.



Role of NOTA in Karnataka Elections



Manipulating Mind-space

THE NEW
INDIAN EXPRESS

Sunday, June, 03, 2018 12:05:08 AM

NATION WORLD STATES CITIES BUSINESS SPORT ENTERTAINMENT GALLERIES VIDEOS LIFESTYLE SPECI

Home > Nation

Artificial Intelligence, GIS, big data helped in successful Bharat Bandh on April 2: US-based Dalit activists

Over the past few years, the group has used AI to harvest available data and those from platforms like Facebook to identify and target the groups to foment unrest against certain political groups.

Published: 17th April 2018 04:31 PM | Last Updated: 17th April 2018 04:31 PM

Manipulating Mind-space

By PTI

WASHINGTON: The Bharat Bandh on April 2 called by Dalit groups was a result of the successful use of artificial intelligence (AI), the geographic information system (GIS) and big data, according to a core group of US-based Dalit activists.

The protest, which surprised many because of its sudden eruption, was organised against the alleged dilution of the SC/ST (Prevention of Atrocities) Act.

New Jersey-based Deelip Mhaske, who heads a secretive network of some 100 overseas Dalit activists based in the US, the UK, Australia and the Middle East said the protest shows that Dalits no longer need to be affiliated to any political establishment.

"A new era for Dalit politics has begun by adopting artificial intelligence, the GIS and social media," Mhaske told PTI in an interview as he gave an insight into how Dalit groups were mobilised during the protest.

Why Geo-intelligence is critical?



Jonathan Albright

Follow

Professor and researcher in news, journalism, and #hashtags. Award-nominated data journalist. Media, communication, and technology.

Oct 14, 2017 · 8 min read

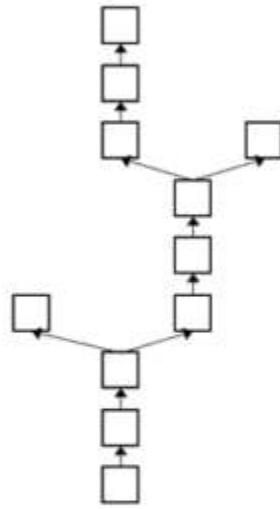
Cambridge Analytica: the Geotargeting and Emotional Data Mining Scripts

Last year, Michael Phillips, a data science intern at Cambridge Analytica, posted the following scripts to a set of “work samples” on his personal GitHub account.

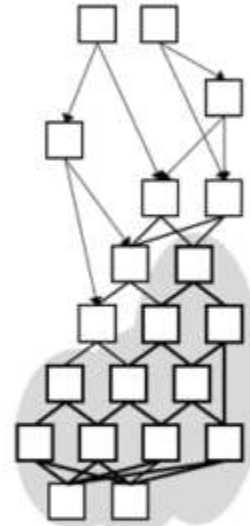
Open Ledgers

Blockchain Vs Tangle Vs Hashgraph

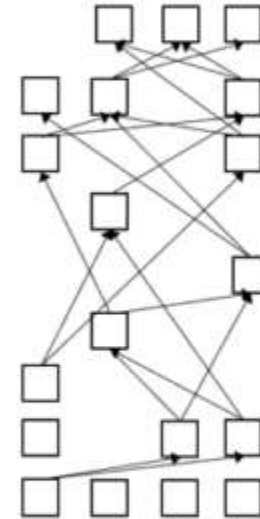
Blockchain



Tangle



Hashgraph



Technology

Block chain

Directed acyclic graph

Directed acyclic graph

Copyright

Open source

Open source

Patented

Consensus

Proof of Work: SHA256-Hash

Proof of Work: check of Tangle tip

Virtual voting

Openness

Public ledger

Public ledger

Private ledger

Applications

Bitcoin

Iota

Swirls

Efficiency (tps)

3-4

500-800

> 250,000

Video Morphing

- **Audio Morphing**
- **Video Morphing**

Mixed Reality



Forensic of Things ???



Thank You