Insecurity Insight

gluoNNet

knowledge exchange for smart decisions

FLASH: 6W's (Insecurity Insight)

Daniel Dobos, Christina Wille

Lancaster University

CERN

Insecurity Insight

Data on People in Danger

Data on People in Danger

Insecurity Insight

Insecurity Insight examines threats facing people living and working in dangerous environments. Our innovative data collection and analysis methods generate insights relevant for aid workers, aid agencies and those concerned with the protection of health workers, educators, IDPs and refugees. Our aim is to empower those who deliver vital services and to give voices to those affected by insecurity

Impunity Remains

Insecurity Insight

SAFEGUARDING HEALTH IN CONFLICT

2018

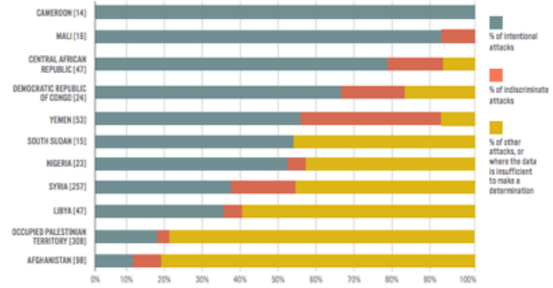
IMPUNITY REMAINS:
Attacks on Health Care in 23 Countries in Conflict

Center for Public Health and Human Rights
Johns Hopkins Bloomberg School of Public Health
IntraHealth International — Because Health Workers Save Lives.
Insecurity Insight — Data on People in Danger
Center for Humanitarian Health
Johns Hopkins University Office of Global Health
ECDHR — European Centre for Democracy and Human Rights
IFEMSA — International Federation of Medical Students' Associations
Médecins du Monde
MAP — Medical Aid for Palestinians
PHR — Physicians for Human Rights
Palestinian Human Rights Organization
Medical Action Myanmar

OVERVIEW

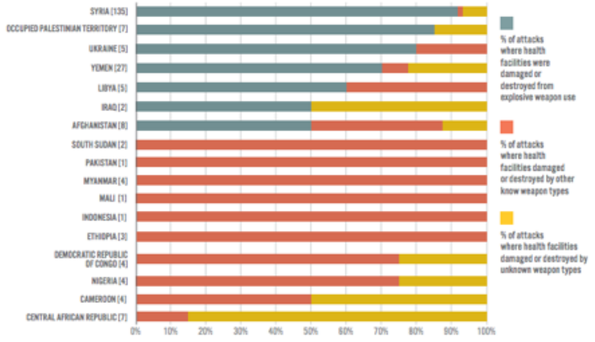
973	167	710	173	111
Total Attacks	Health Workers Killed	Health Workers Injured	Health Facilities Damaged/Destroyed	Health Transport Damaged/Destroyed

SUSPECTED INTENTIONAL VERSES SUSPECTED INDISCRIMINATE ATTACKS ON HEALTH CARE



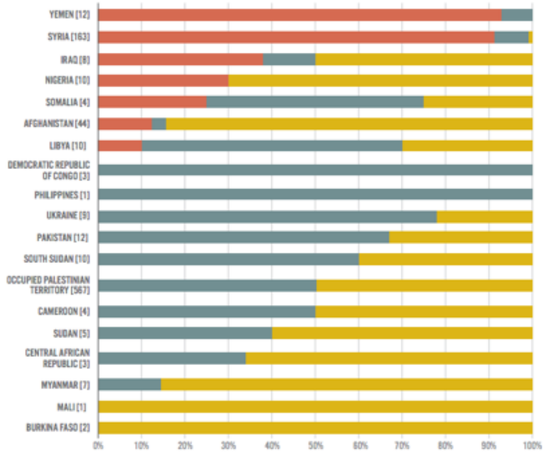
This graph shows the proportion of suspected intentional attacks on health care compared to suspected indiscriminate attacks in countries where 14 or more attacks were documented. Totals attacks per country are shown in brackets.

DAMAGE TO OR DESTRUCTION OF HEALTH FACILITIES BY WEAPON TYPE



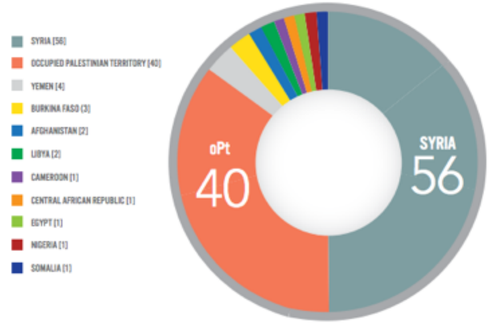
This graph shows the proportion of attacks where explosives weapons caused damage to or destruction of health facilities in comparison to damage or destruction caused by other known or unknown weapons in countries reporting health facility damage or destruction. Total numbers of attacks that either damaged or destroyed a health facility, per country are shown in brackets.

DEATHS AND INJURIES OF HEALTH WORKERS BY WEAPON TYPE



This graph shows the proportion of attacks where explosive weapons use caused death or injury to health workers in comparison to death and injuries of health workers caused by other known or unknown weapons in countries where health workers were reportedly killed or injured. Totals per country are shown in brackets.

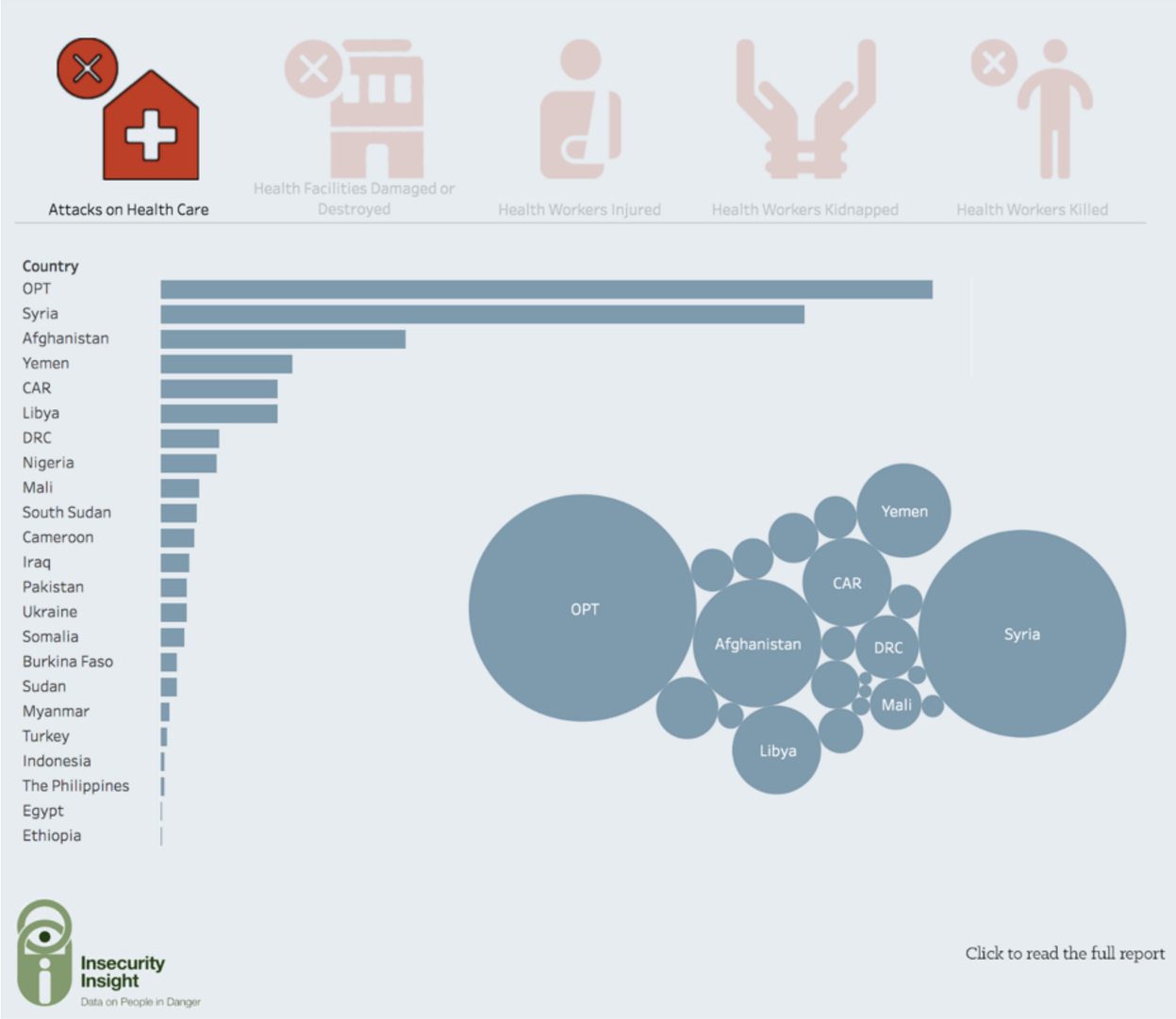
AMBULANCES DAMAGED OR DESTROYED IN 11 COUNTRIES

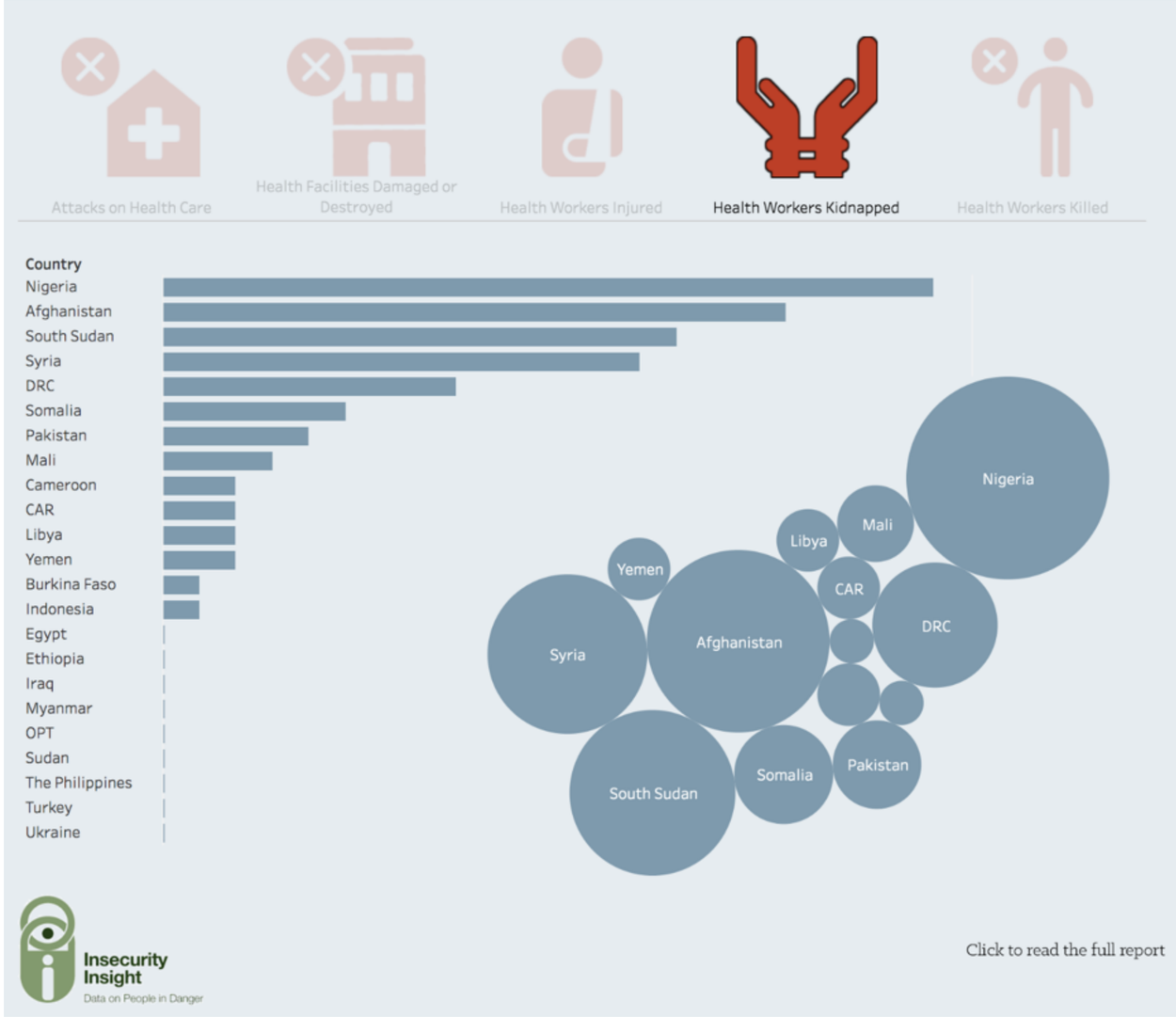


This graph shows the proportion of events where ambulances were reportedly damaged or destroyed. Totals per country are shown in brackets.

Impunity Remains

Insecurity Insight



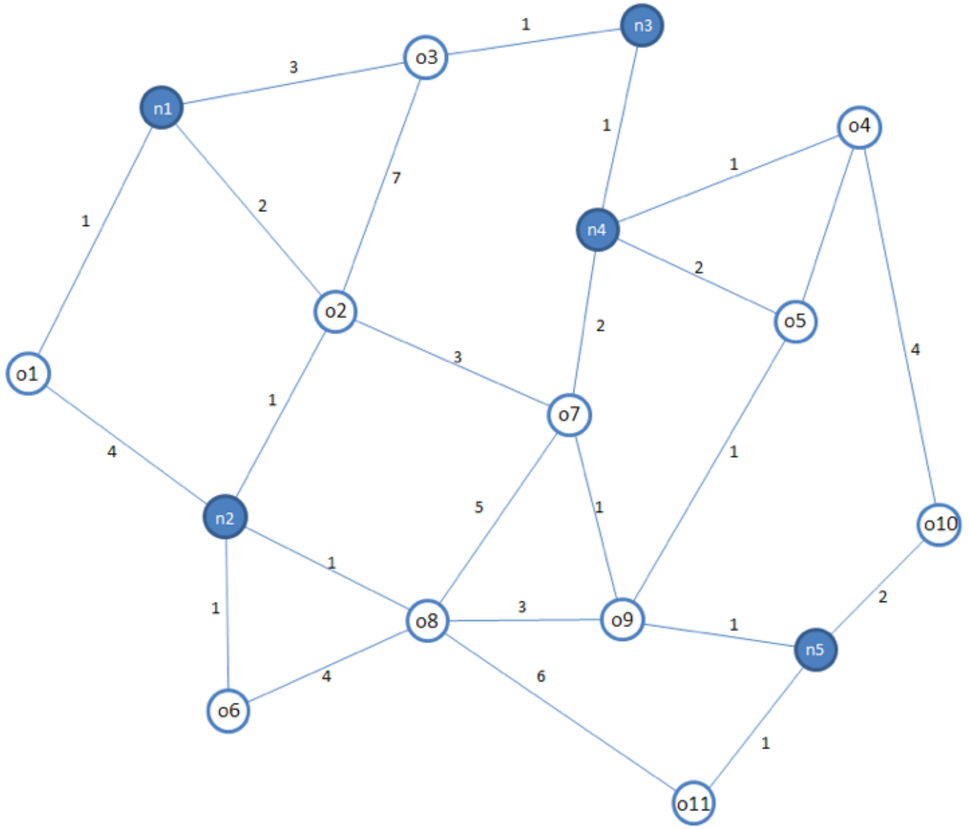


Impact Storytelling

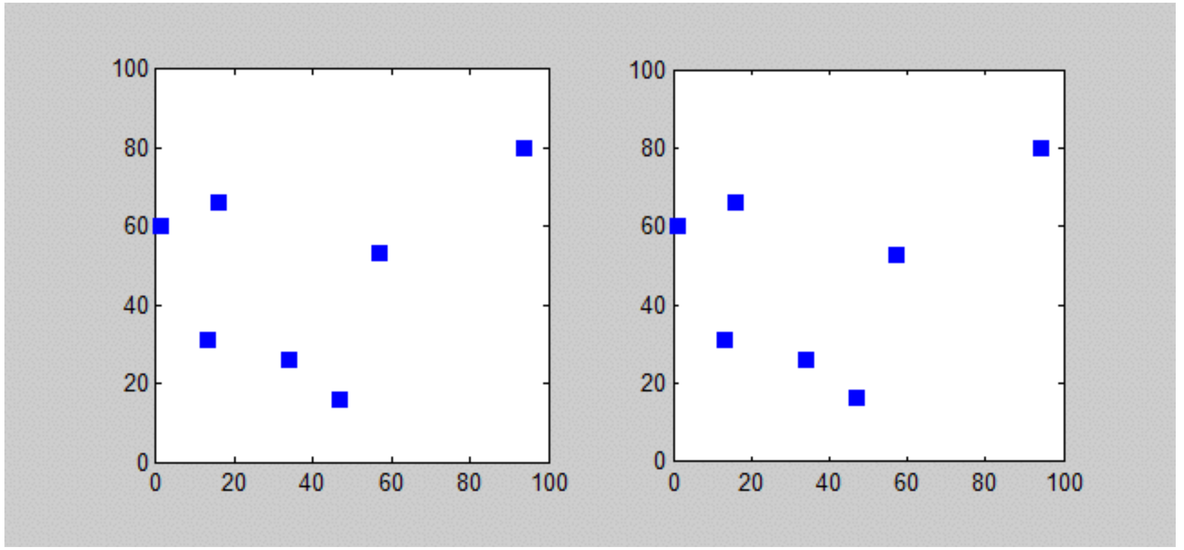
Insecurity Insight

gluoNNet

6 W's: **W**ho? did **W**hat? to **W**hom? **W**hen? **W**here? with which **W**eapon?



NP-hard problem

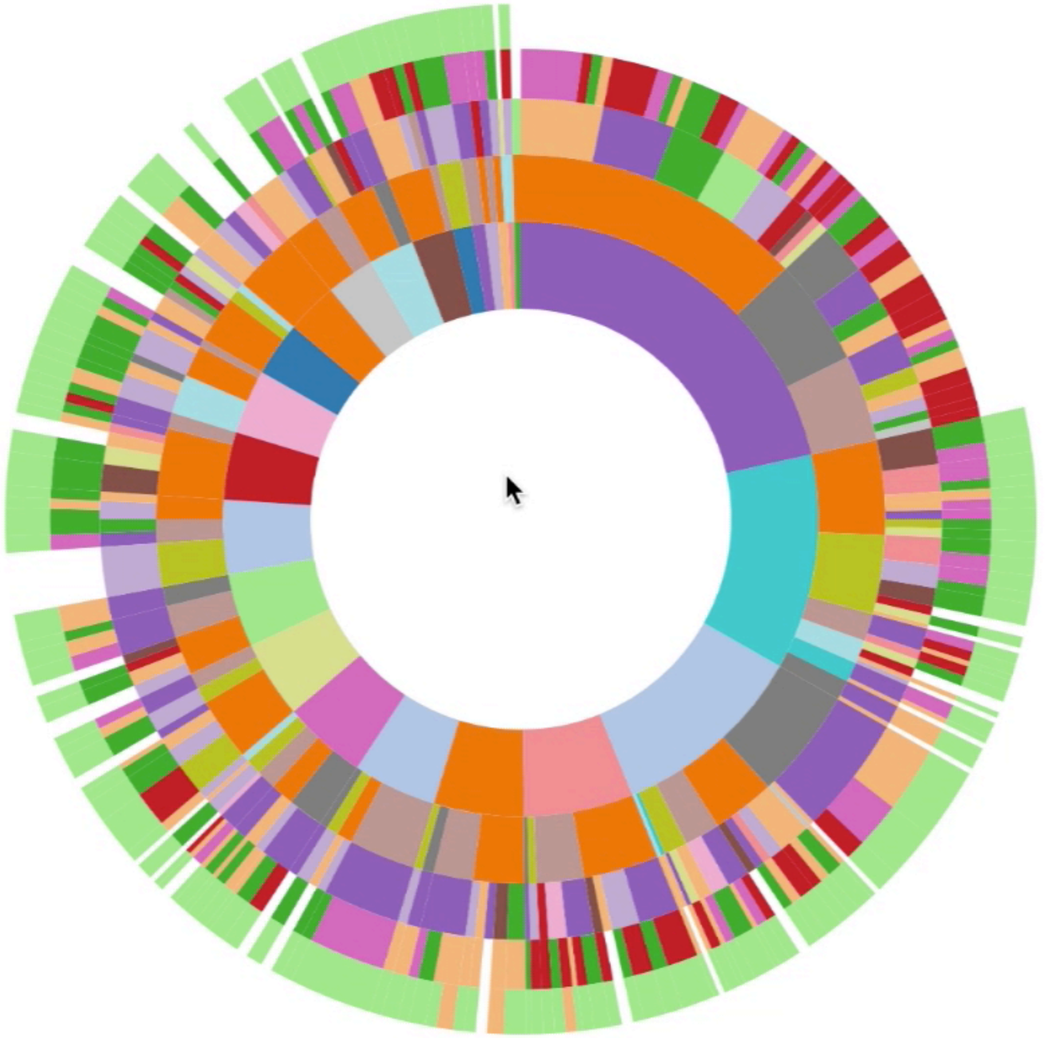


combinatorics increases superpolynomially (but no more than exponentially) with the number of 'cities' => $(n-1)!/2$ 'paths'

Insecurity Insight

gluoNNet

Where
Whom
What
Weapon
Armed



Best Stories Finder

Insecurity Insight

gluoNNet

UTSP: Undecided Travelling Salesman Problem

The Undecided Travelling Salesman, can't decide which product to sell

-

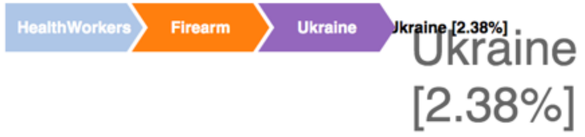
He starts with a big list of products, with at least as many product properties as cities to visit.

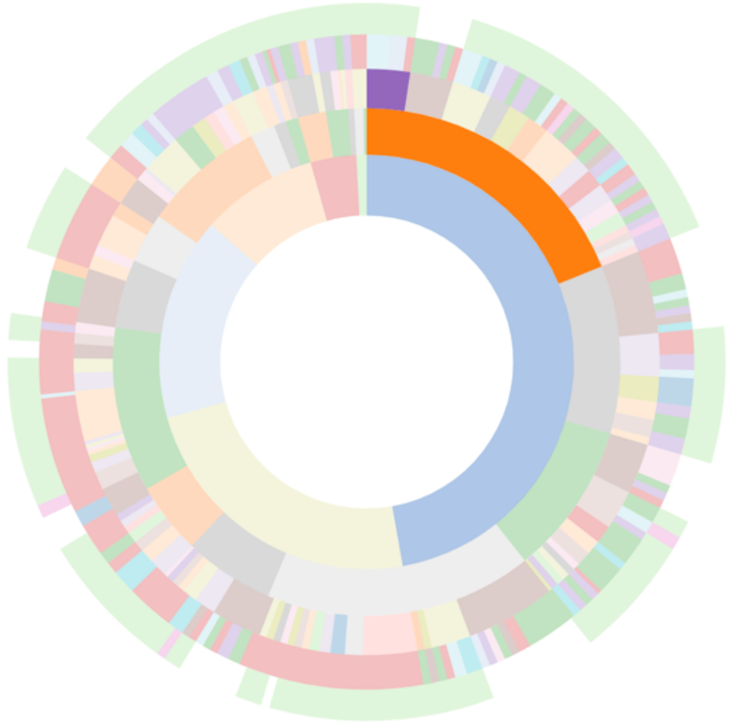
-

In each city he has to choose a specific property instance and he has to leave all products with other property instances behind.

-

How can he give best advice for future salesman?

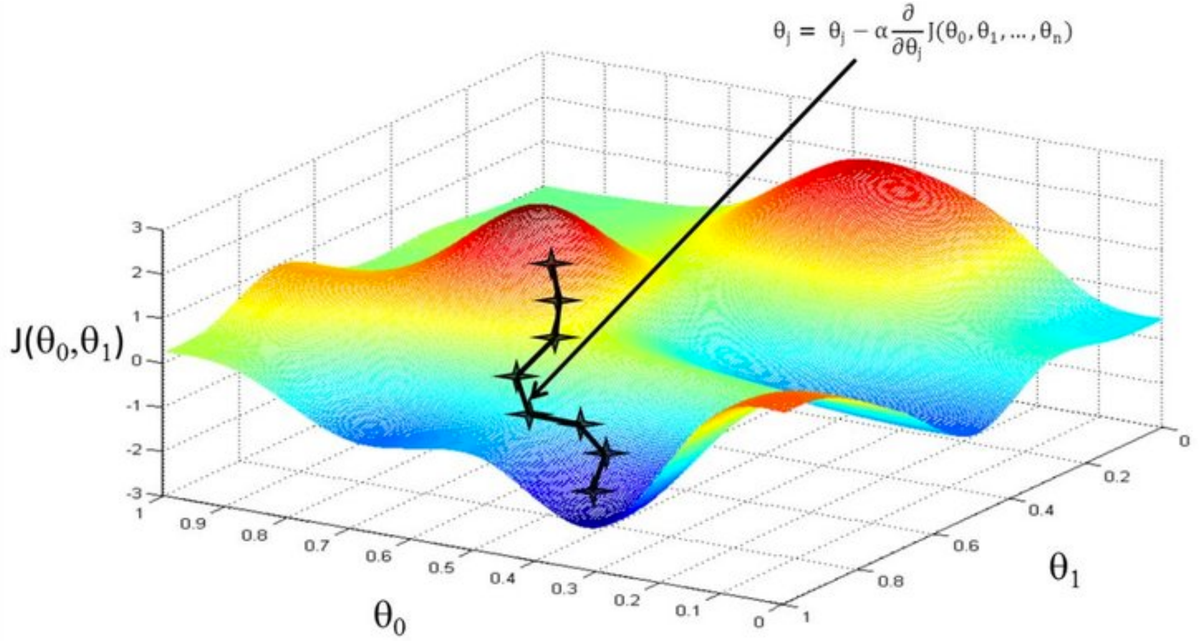


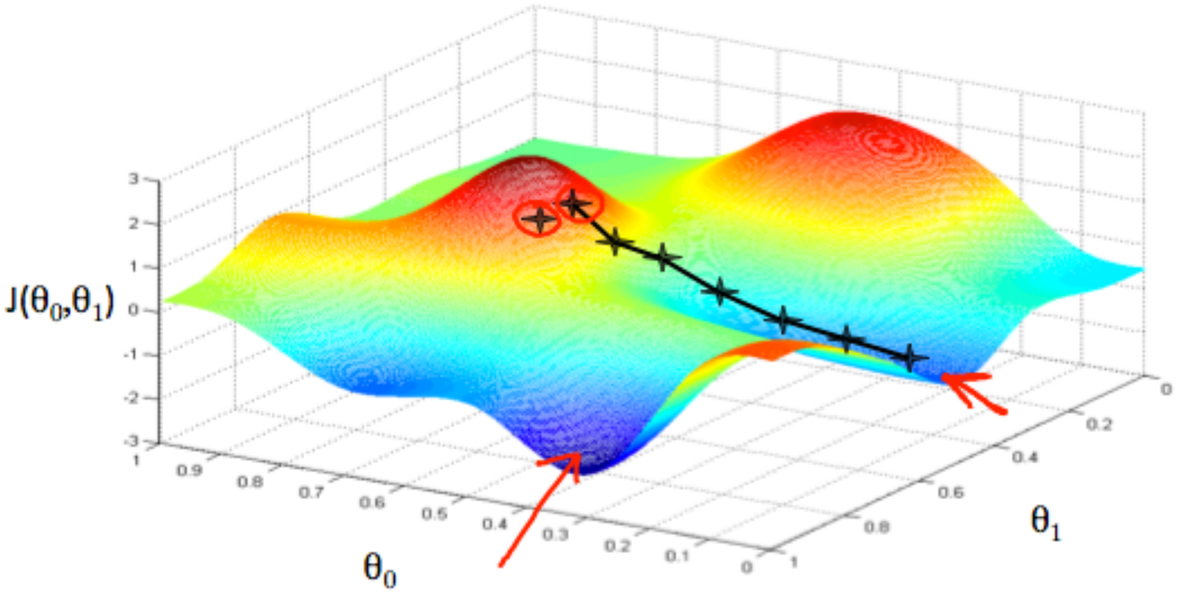


Best Stories Finder

Insecurity Insight

gluoNNet





Best Stories / Learnings:

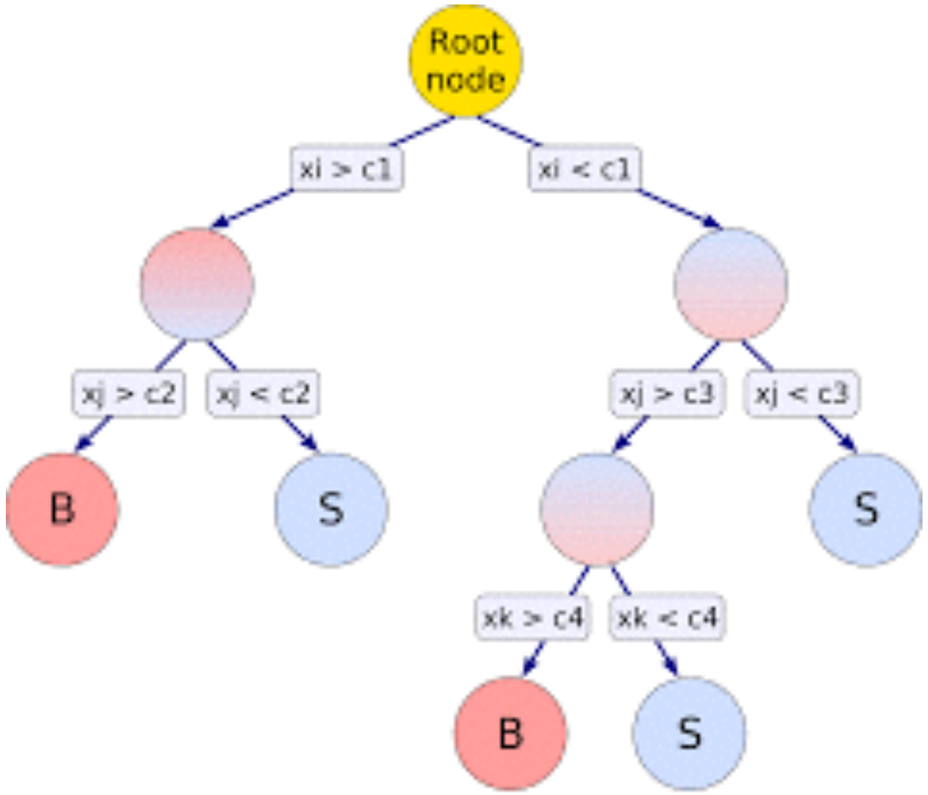
1. General Rules: many ‘paths’ lead to same or similar result
   => easy / obvious to find
2. Specific Exceptions (small ‘path’ change leads to significant result difference
   => difficult / hard to find => unexpected insights

Best Stories Finder

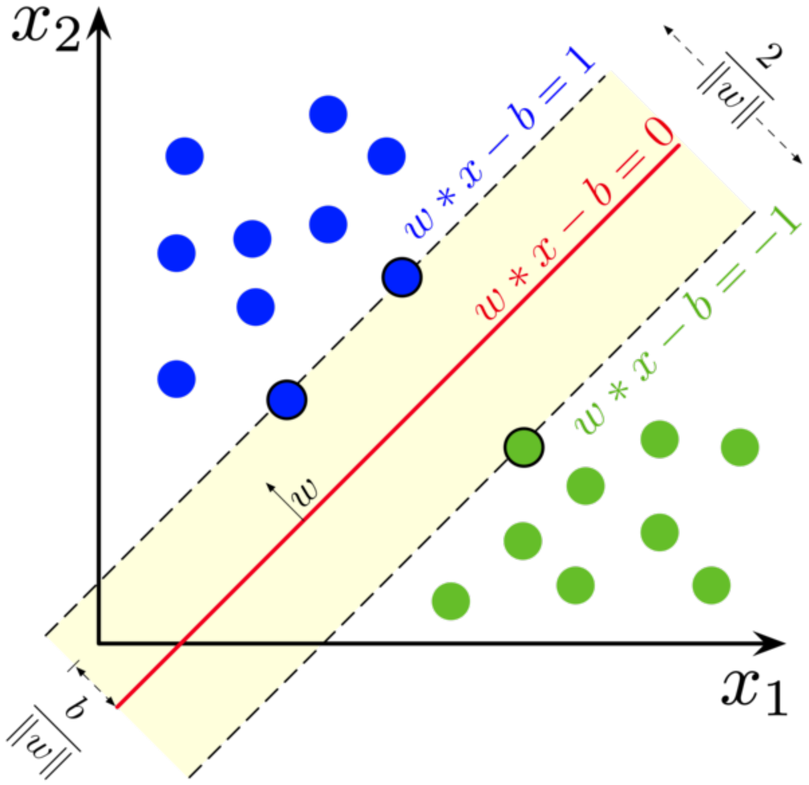
Insecurity Insight

gluoNNet

Boosted Decision Tree (BDT)



Support Vector Machine (SVM)



Best Stories Finder

Insecurity Insight

gluoNNet