
Meetup IoT: Algoritmi odrešitve (*Algorithms of redemption*), Ljubljana, 1. dec. 2017

Demokracija ali algokracija (*Democracy or algocracy*)

od vladavine prava do vladavine algoritmov?

(*From the rule of law to the rule of algorithms?*)

Izr. prof. dr. Aleš Završnik

Collegium
Helveticum



ETH zürich



Universität
Zürich

Z

hdk



Vsebina

1. Roman Zakharov proti Rusiji
2. Facebook eksperiment
3. Cambridge Analytica

Vsebina

1. Roman Zakharov proti Rusiji
2. Facebook eksperiment
3. Cambridge Analytica

Roman Zakharov proti Rusiji

1. Status žrtve in obstoj kršitve
2. Dovoljeni posegi (8. čl. EKČP)
 - a. Ustrezno pravo
 - b. Legitimni cilj
 - c. Nujen ukrep...

Roman Zakharov proti Rusiji

1. Dostopnost zakona
2. Pogoji odreditve, obseg, način izvedbe, zoper koga
3. Trajanje, podaljšanje, prenehanje

Roman Zakharov proti Rusiji

1. Dostopnost zakona
2. Pogoji odreditve, obseg, način izvedbe, zoper koga
3. Trajanje, podaljšanje, prenehanje
4. Shranjevanje, dostopanje, pregledovanje...
5. Postopek odreditve
6. Nadzor nad izvajanjem
7. Obveščanje posameznika

Vsebina

1. Roman Zakharov proti Rusiji
2. Facebook eksperiment
3. Cambridge Analytica

Facebook eksperiment

- emocionalno okuženje na masovni ravni
- manipulacija z novicami (*news-feed*)
- ideja: dolgotrajno razpoloženje (npr. depresija, sreča) se lahko premesti preko mrež
- N = 689,003

Facebook eksperiment

- misli, čustva, “srčni utrip”
- osebni stik in neverbalni znaki niso nujni za emocionalno okužbo
- “emotional contagion” v. “political contagion”?

Kramer, A. D. I., Guillory, J. E., & Hancock, J. T. (2014). Experimental evidence of massive-scale emotional contagion through social networks. *Proceedings of the National Academy of Sciences*, 111(24), 8788–8790

Facebook experiment

„When **positive** expressions were reduced, people produced fewer positive posts and more negative posts; when **negative** expressions were reduced, the opposite pattern occurred. “

“These results indicate that emotions expressed by others on Facebook influence our own emotions, constituting experimental evidence for massive-scale contagion via social networks.” (Kramer, A. D. I. *et al.*, 2014)

Vsebina

1. Roman Zakharov proti Rusiji
2. Facebook eksperiment
3. Cambridge Analytica

Cambridge Analytica

- 5.000 podatkov o vsakem volivcu v ZDA
- psihološko profiliranje (test osebnosti “Big 5”)
- oblikovanje skupin
- mikro-targetiranje

“Weaponized AI Propaganda Machine”

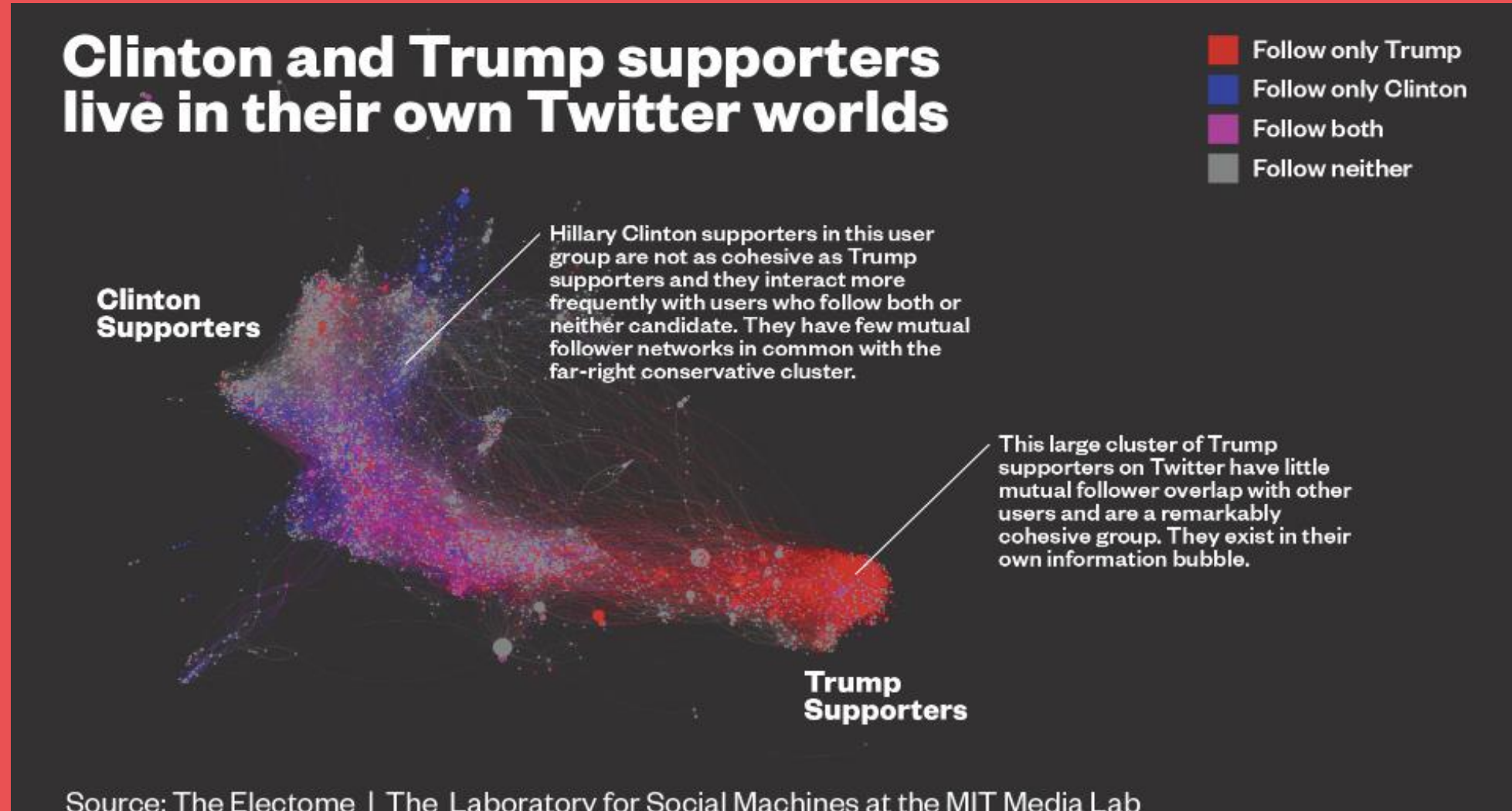
(B. ANDERSON & B. HORVATH, Scout, 2017)

Cambridge Analytica

- Kakšen je učinek?
- Vpliv na volivce ali na skupine?
- Družbeno sortiranje:

“Social sorting on steroids” (D. Lyon)

Primer

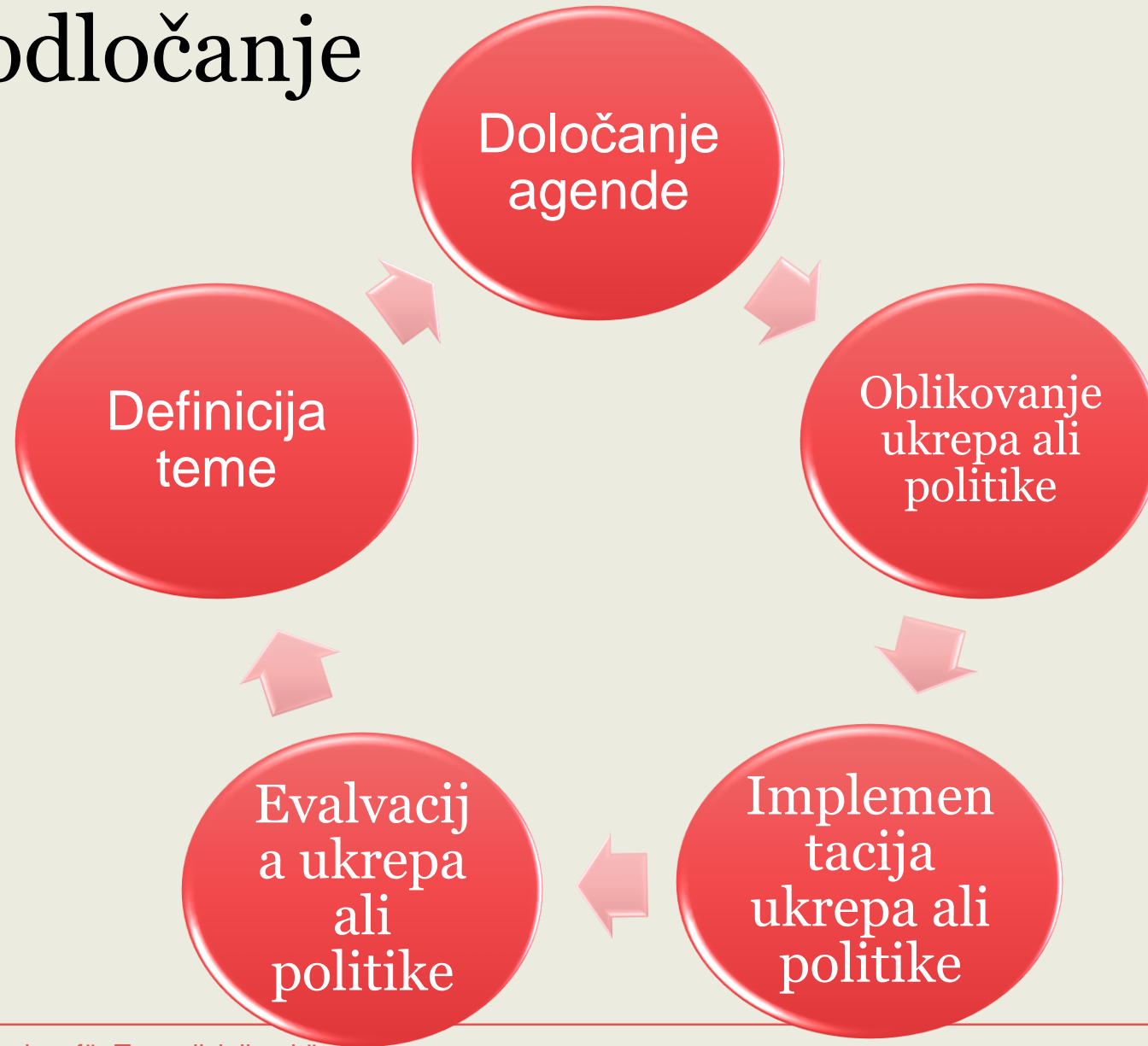


vladavina prava

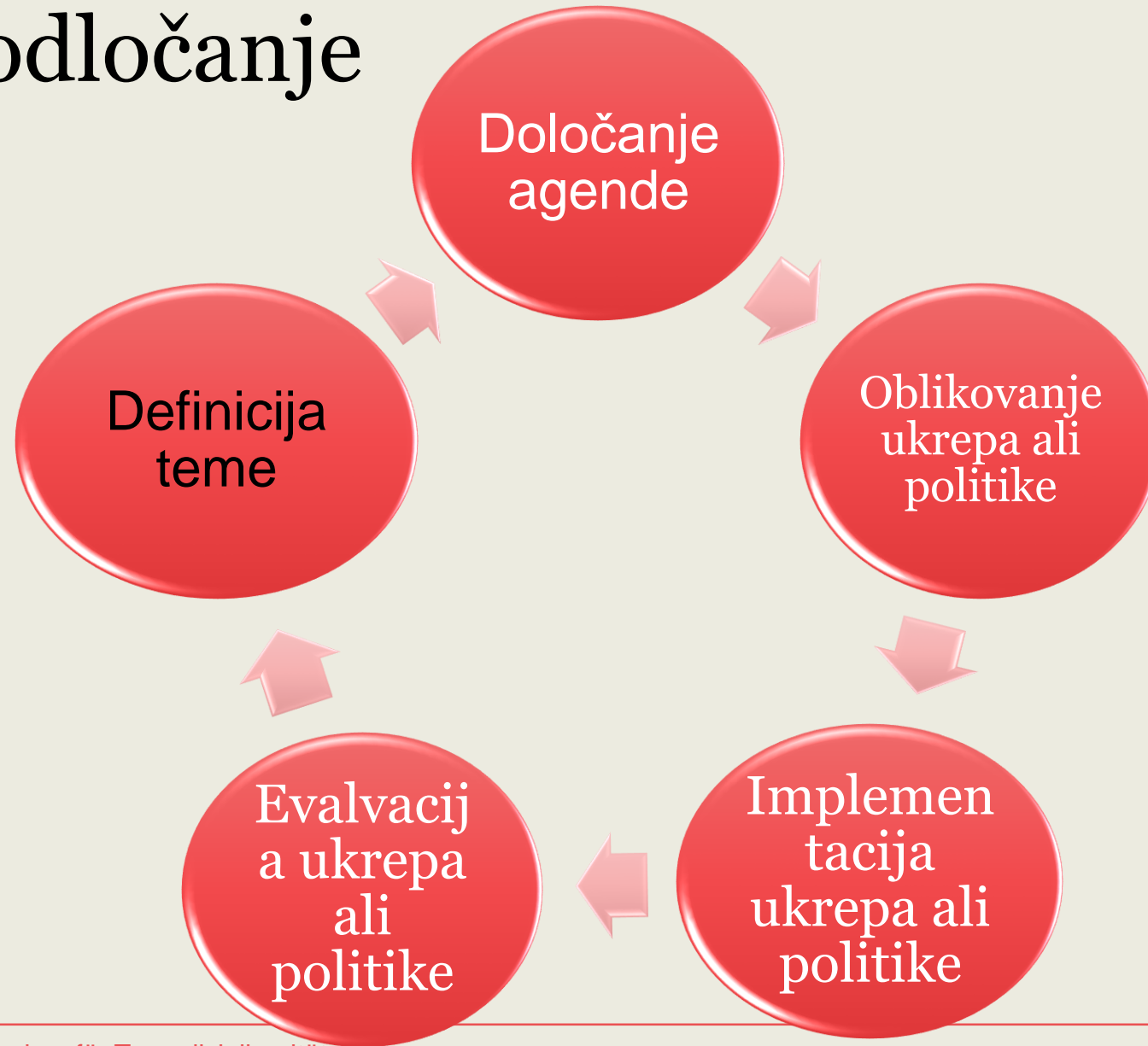
ali

vladavina algoritmov

Politično odločanje



Politično odločanje



Vplivi na demokracijo

1. Delovanje javne uprave (e-uprava)
2. E-volitve
- 3 .Referendum in ljudska iniciativa (WeCollect, Avaaz...)
- 4 .Polarizacija mnenj in mikro targeting

Vplivi na demokracijo

- From narrative to database (Franko Aas, 2004)
- From database to automated decision-making (Završnik, 2017)

ZAVRŠ NIK, Aleš (ur.). Big data, crime and social control, (Routledge frontiers of criminal justice, 50). Abingdon; New York: Routledge, 2017, str. 3-28.

Vplivi na demokracijo

- Dostop do podatkov mobilnih operaterjev (Rusija)
- Cambridge Analytica (ZDA, Brexit)
- Total Information Awareness System (Singapore)
- Threat Score, BeWare programe (ZDA)
- Credit rating sistem (Kitajska)

PRIMER 1: represivni aparat

- 1) Obveščevalne službe
- 2) Varnostni organi
- 3) Kazensko sodstvo: priporne zadeve in odločanje o sankciji
- 4) Komisije za pogojne odpuste
- 5) Pomoč zagovornikom pred sodiščem

PRIMER 1: represivni aparat

- 1) Napoved izida pravnih sporov
- 2) Sofinanciranje tožb (e.g. Legalist.us),
- 3) Pomoč zagovornikom pri pripravi primera (e.g. rossintelligence.com)
- 4) Napovedovanje sodnih odločitev

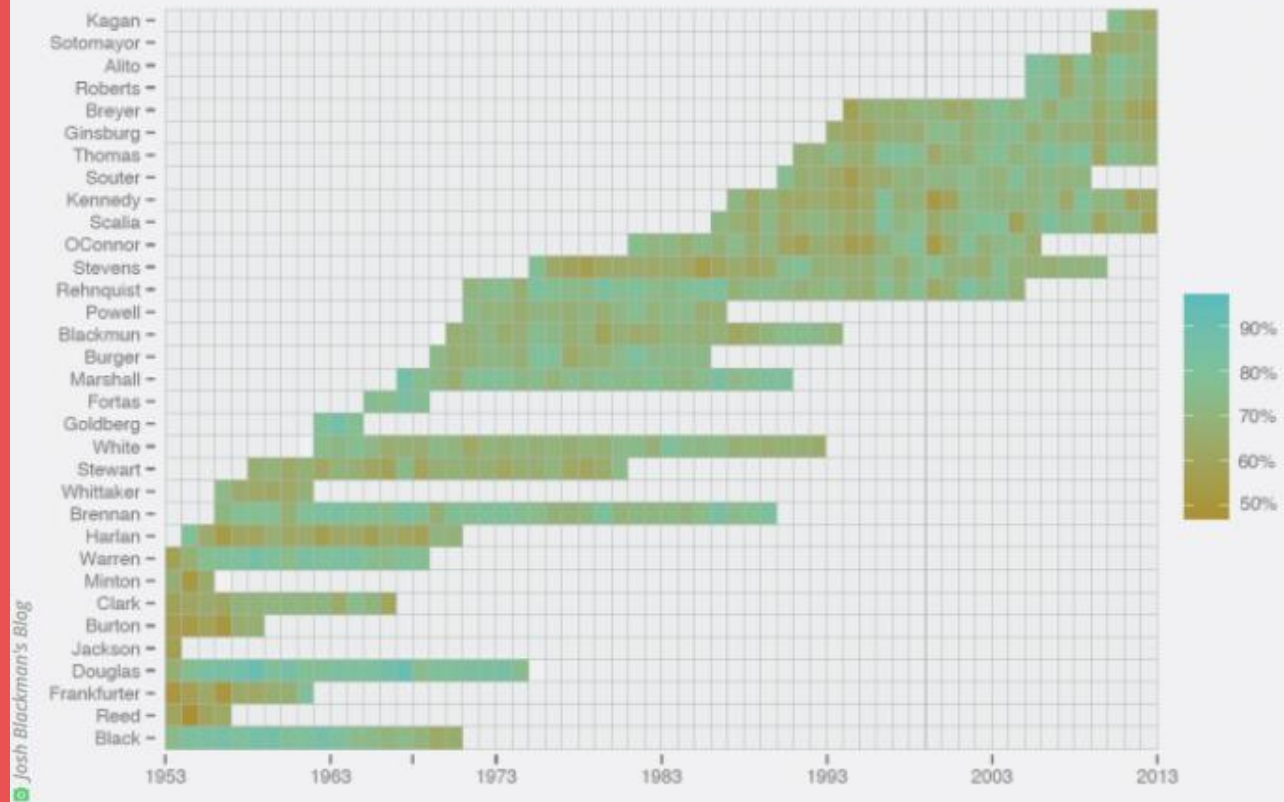
Primer

SCIENTIFIC METHOD —

Algorithm predicts US Supreme Court decisions 70% of time

Supreme Court fantasy league to compete against computer model in upcoming term.

DAVID KRAVETS - 7/30/2014, 6:41 PM



Primer



✓ PEER-REVIEWED

Predicting judicial decisions of the European Court of Human Rights: a Natural Language Processing perspective

Artificial Intelligence

Computational Linguistics

Data Mining and Machine Learning

Data Science

Natural Language and Speech

Nikolaos Aletras^{1,2}, Dimitrios Tsarapatsanis³, Daniel Preoțiu-Pietro^{4,5}, Vasileios Lamos²

October 24, 2016

> Author and article information

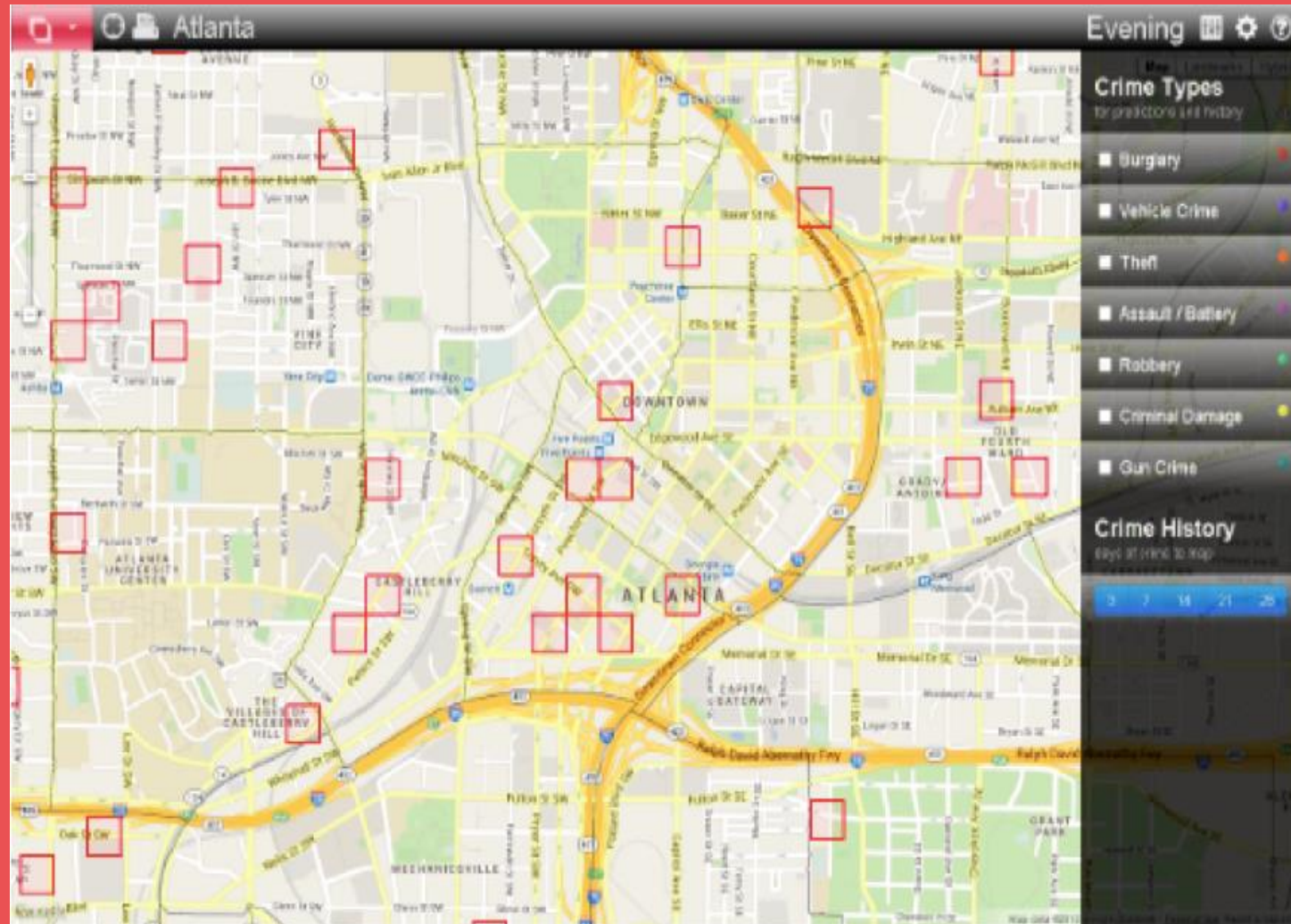
✓ Abstract

“Our models can predict the court’s decisions with a strong accuracy (79% on average).”

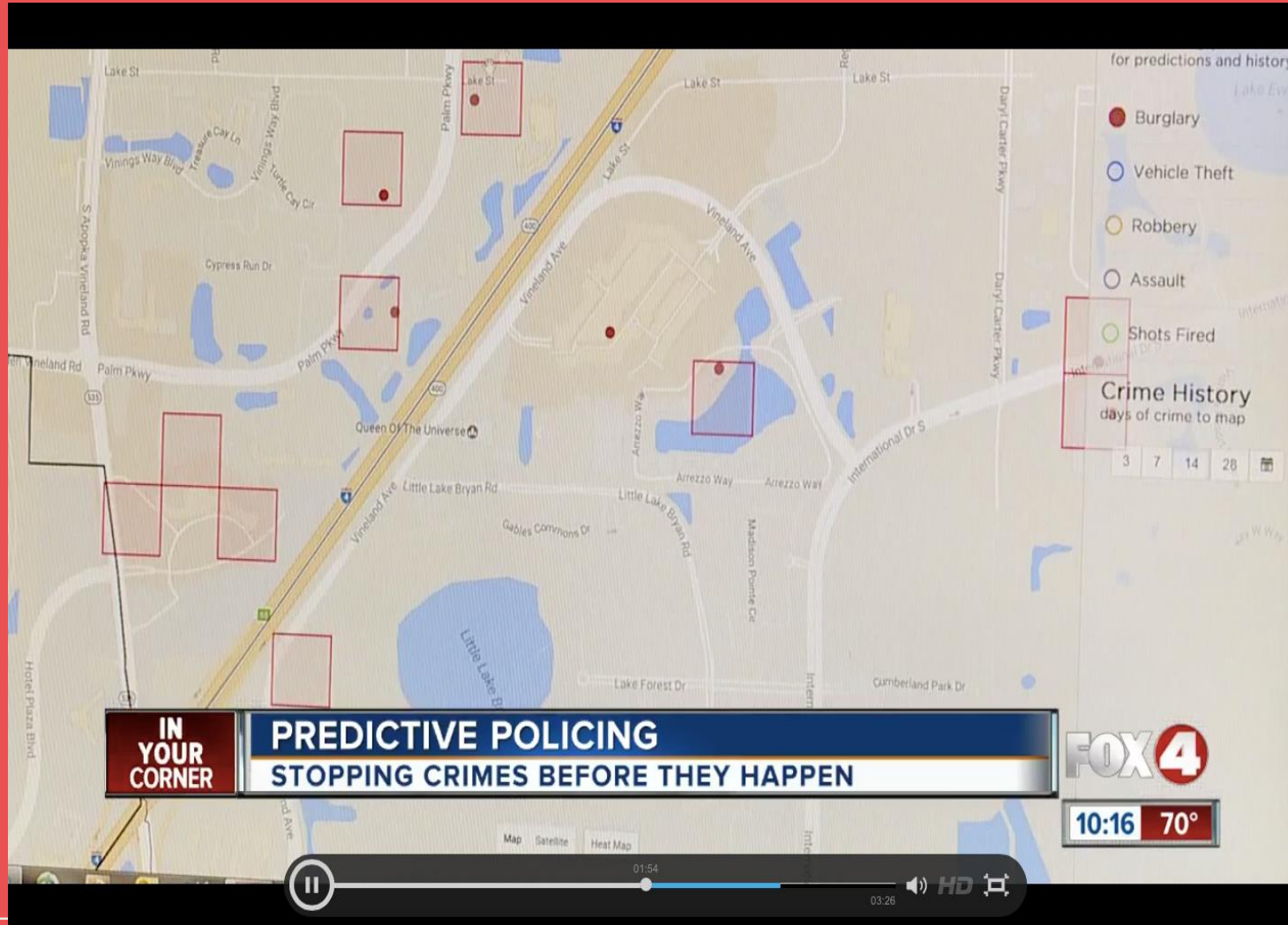
PRIMER 2: avtomatizirano policijsko delo

- Preventivno iskanje Muslimanov v Nemčiji
- Prevenција pred zlorabo kartičnega poslovanja
- Identifikacija članov nasilnih skupin (VB)
- Napovedni policijski programi
(e.g. *BlueCrush*, *TrapWire*)...

Primer: crime predictive software



Primer: crime predictive software



Primer: crime predictive software

The new way police are surveilling you: Calculating your threat 'score' - The Washington Post 17/08/16 13:35

The Washington Post
Public Safety

The new way police are surveilling you: Calculating your threat 'score'

By **Justin Jovenal** January 10

FRESNO, Calif. — While officers raced to a recent 911 call about a man threatening his ex-girlfriend, a police operator in headquarters consulted software that scored the suspect's potential for violence the way a bank might run a credit report.

The program scoured billions of data points, including arrest reports, property records, commercial databases, deep Web searches and the man's social-media postings. It calculated his threat level as the highest of three color-coded scores: a bright red warning.

The man had a firearm conviction and gang associations, so out of caution police called a negotiator. The suspect surrendered, and police said the intelligence helped them make the right call — it turned out he had a gun.

Primer: Automated Inference on Criminality using Face Images



(a)



(b)

Figure 9. (a) The four subtypes of criminal faces; (b) The three subtypes of non-criminal faces.

(Xiaolin & Xi, 2016)

Primer: Automated Inference on Criminality using Face Images

Kriminalne poteze:

Oblika ustnic

Notranja razdalja med očmi

Kot med nosom in usti

(Xiaolin & Xi, 2016)

Hvala za pozornost!

