## HANDS-ON INTRODUCTION TO ELASTICSEARCH

EMANUIL TOLEV @EMANUIL\_TOLEV





### COMMUNITY ENGINEER





### **Elasticsearch**

Elasticsearch is a distributed,
JSON-based search and
analytics engine.

**Learn more** 



#### Kibana

Kibana is the window into the Elastic Stack. Explore your data and manage the stack.

**Learn more** 



### **Beats**

Beats is a platform for lightweight shippers that send data from edge machines.

Learn more



### Logstash

Logstash is a dynamic data collection pipeline with an extensible plugin ecosystem.

**Learn more** 



# HOW BIG IS YOUR JUPYTER NOTEBOOK?



# HOW LONG IS A PIECE OF STRING...



# ELASTICSEARCH SCALES HORIZONTALLY - YOU CAN ADD MORE PIECES



### USE IN PRODUCTION

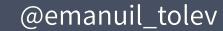
- > SEARCH (ONLINE SHOPS, ADMIN TOOLING, RECOMMENDER SYSTEMS, ...)
  - > ANALYTICS (BUSINESS METRICS)
  - > WEB APP MONITORING: 'LOGGING, METRICS, TRACES'
    - > INTERACTIVE DASHBOARDING
  - > UNSUPERVISED LEARNING FOR ANOMALY DETECTION (PAID! BUT GOOD)
    - > NOW SECURITY TOO



### THE SEARCH EXPERIENCE

- > IT'S MORE THAN A BACK-END TO INSTALL AND CONNECT TO
  - > FULL-STACK VIEW: GREAT UX IS THE GOAL
    - > RELEVANCE, RANKING, SPEED
  - > OF COURSE YOU DO ALSO NEED A BACK-END:)





### **TODAY**

- > SETUP AND CONNECT
- > INDEX (PUT DATA IN)
- > QUERY (GET DATA OUT SEARCH AND AGGREGATE)
  - > USE KIBANA TO CREATE A FEW VISUALISATIONS
    - > ET VOILA!



### HTTPS://GITHUB.COM/EMANUIL-TOLEV/ES-HANDS-ON-INTRO

- > FOR THOSE WHO HAVEN'T DONE IT YET, DOCKER-COMPOSE UP AND THEN RUN ./BUILD.SH TO INJECT SAMPLE DATA
  - > FOLLOW DEMO-CONSOLE.TXT IN HTTP://LOCALHOST:5601/ APP/KIBANA#/DEV\_TOOLS/CONSOLE
    - > LATER WE'LL PLAY WITH KIBANA. THE VIS GUI!



### HTTPS://GITHUB.COM/EMANUIL-TOLEV/ES-HANDS-ON-INTRO

- CREATE A PIE CHART SHOWING HOW MANY WOMEN ARE IN THE DATASET.
  GROUPED BY COUNTRY
  - > CREATE A CHART SHOWING HOW MANY MEN BORN BEFORE 1950 ARE INTERESTED IN MARKETING.MUSIC (THAT WE KNOW OF)
    - > CREATE 1 BAR CHART, 1 PIE CHART AND 1 AREA GRAPH OF YOUR CHOOSING
  - > IF YOU HAVE TIME. TRY THE TSVB VISUALISATION (VISUAL BUILDER).
    WHAT FIELDS SEEM APPROPRIATE TO USE HERE?



## QUESTIONS? EMANUIL TOLEV @EMANUIL\_TOLEV ETOLEV@ELASTIC.CO

