

# HANDS-ON INTRODUCTION TO ELASTICSEARCH

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elastic

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](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?

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