## DATA ANALYSIS WITH KIBANA

A powerful search and analytics engine needs an equally powerful user interface for creating advanced visualization and performing deeper analysis. This course focuses on exactly that, using Kibana to analyse data in Elasticsearch. Starting with the fundamentals, you will learn the core concepts of data analysis using Kibana — from simple aggregation-based charts to complex geo-based visualization to complex time series visualizations — through lectures, labs, and Q&A sessions. You will also learn how to create visualizations and dashboards across a variety of data sets, as well as how to manage Kibana by handling saved objects and creating spaces. By the end of this course, you will be able to easily find answers and anomalies in your Elasticsearch data sets using Kibana.

### **LESSONS**

### Kibana fundamentals

Learn how Kibana and the other components of the Elastic Stack can help you better understand your data. Work with the Discover interface to explore your data, and then create visualizations with Lens.

#### Kibana search

Find answers in your data set using the Kibana query bar and then refine your result set with filters. Learn how to decrease query time by reducing your data to a smaller subset prior to searching.

### **Kibana visualizations**

Turn your data into easy-to-understand visualizations. Explore the available visualization options, perfecting your visualizations by customizing the axis, colors and display of the metrics. Learn how to display multiple metrics in the same visualization or break them down to multiple, more comprehensible visualizations.

### Kibana visual builder

Make time series data analysis easy with TSVB. Learn how to build complex time series visualizations with just a few clicks.

## Kibana geo visualizations

Geo based visualizations are everywhere. They are used in a security context, when displaying movement, and for showing user position or density in specific areas. In this lesson you are going to learn everything there is to know about the creation of geo visualizations, from creating a simple coordinate map to mixing different layers together.

### Kibana dashboards

Develop powerful dashboards that deliver insight to any audience. Learn how to customize and share your dashboards. Use what you've learned to detect anomalies in data on a guided hunt. Explore the basics about Canvas, an infographic tool that can help representing data the way you want.

## Kibana advanced tools for analysts

Kibana offers many tools for data analysts. In this lesson you are going to explore some of the advanced ones. Learn how to build and analyze more advanced visualizations, such as derivatives and moving averages. Understand how, behind the scenes, search is powered by the Elasticsearch DSL. Discover how Vega allows you to build rich, interactive visualizations.

# **Machine learning fundamentals**

A lot of the data is often unused because there is so much of it. Machine learning helps you analyze this unused data in an unsupervised way. In this lesson you are going to learn how to create machine learning jobs to analyze data.

# **Kibana interfaces**

Learn about Kibana apps, pre-built tools for specific use cases, such as observability and security. Learn how to generate reports and how to manage saved objects, such as searches, visualizations, and dashboards. Understand Spaces, a way to organize your dashboards and visualizations into meaningful categories that only defined users have access to. Take your users experience to the next level by customizing some advanced settings.