



# SENTIMENT ANALYSIS AND BRAND MONITORING



## DATA SCIENCE COURSE OUTLINE

### Overview

Thanks to machine learning, anomaly detection has never been easier. This course will show you how to leverage the machine learning capabilities of the Elastic Stack to find anomalous data. Using Twitter data in a series of labs, you will learn to ingest and enrich data via an external API, and then analyze social network data with the Elastic Stack. Then, using machine learning, you will learn how to quickly detect anomalous behavior, such as spam tweets. After completing this course, you will be able to start using machine learning in your Elasticsearch clusters.

### Audience

Data Scientists, Data Architects, Data Engineers

### Duration

2-3 hours

### Language

English

### Prerequisites

- We recommend you have taken [Elasticsearch Engineer I](#) and [Elasticsearch Engineer II](#) or possess equivalent knowledge. Engineer I and Engineer II teach the concepts that are the foundation upon which all specializations are built.
- Familiarity with Logstash
- A Twitter developer account

### Requirements

- Stable internet connection
- Mac, Linux, or Windows
- Latest version of Chrome or Firefox (Safari and IE are not 100% supported)
- Due to virtual classroom JavaScript requirements, we recommend that you disable any ad-blockers and restart your browser before class.



# SENTIMENT ANALYSIS AND BRAND MONITORING

## Modules

### Unit 1

- Learn how the Elastic Stack can use machine learning to solve real world problems.
- **Hands-On Lab**

### Unit 2

- Learn how to use the Logstash Twitter input plugin to collect and monitor information on the social network, using localization, keywords, and more.
- **Hands-on Lab**

### Unit 3

- Learn how to build a basic Python API in order to do sentiment analysis of tweets and how to integrate this API directly into Logstash.
- **Hands-on Lab**

### Unit 4

- Monitoring the results of your APIs is a very important part of your machine learning process. This unit will teach you how to use Kibana in order to monitor your APIs behaviour.
- **Hands-on Lab**

### Unit 5

- Elasticsearch offers machine learning features out of the box. Learn how to leverage those features in order to detect potential anomalies in data.
- **Hands-on Lab**