

Twitter Sentiment Analysis of COVID19

The screenshot shows a GitHub profile for user AnandKumar1984. The profile includes a pink and white geometric avatar, a bio stating 'ProTip! Updating your profile with your name, location, and a profile picture helps other GitHub users get to know you.', and a message 'You don't have any public repositories yet.' The 'Overview' tab is selected, showing 1 contribution in the last year on a calendar grid. A yellow banner at the top prompts the user to verify their email address.

The screenshot displays the 'SampleSentAnalysis' page within the Twitter Developer Portal. The page is titled 'SampleSentAnalysis' and has tabs for 'Settings' and 'Keys and tokens'. Under 'Consumer Keys', there is a warning: 'On 01/12/2021 your consumer keys will no longer be visible. To increase security, make sure to save your keys before they're permanently hidden. Select View keys below and save them somewhere safe.' Below this, there is a section for 'API Key & Secret' for the user '@manandinfo', with buttons for 'View Keys' and 'Regenerate'. The 'Authentication Tokens' section shows a 'Bearer Token' for '@manandinfo' with a 'Generate' button. A sidebar on the left contains navigation links like 'Dashboard', 'Projects & Apps', 'Products', 'Twitter API', 'Labs', 'About', 'Docs', 'Premium', 'Dev Environments', and 'Account'. A 'Helpful docs' section on the right lists links for 'How to use projects', 'App permissions', 'Authentication overview', 'Authentication best practices', 'Using bearer tokens', and 'Using access token & secret'.

Resource list

Name	Group	Location	Offering	Status	Tags
Cloud Foundry apps (2)					
Node RED BNBIR 2020-09-30	m_anandkumar@nitk.edu.in / dev	London	SDK for Node.js™	Started	—
Sentiment_Analysis	m_anandkumar@nitk.edu.in / dev	London	SDK for Node.js™	Started	—
Cloud Foundry services (1)					
sentiment-analysis-cloudant-1602336122...	m_anandkumar@nitk.edu.in / dev	London	Cloudant	Provisioned	—
Services (6)					
Continuous Delivery	Default	Dallas	Continuous Delivery	Active	—
Text to Speech-97	Default	London	Text to Speech	Active	—
Tone Analyzer-1f	Default	London	Tone Analyzer	Active	—
Watson Assistant-8i	Default	London	Watson Assistant	Active	—
Watson Studio-6i	Default	Dallas	Watson Studio	Active	—
sentiment-analysis-cloudant-1602336122...	Default	Dallas	Cloudant	Active	—

<https://sentimentanalysisnitk.eu-gb.mybluemix.net/ui/>

Connections

Name	Group	Route	Status
Sentiment_Analysis	m_anandkumar@nitk.edu.in / dev	sentimentanalysisNITK.eu-gb.mybluemix.net	Started

Sample Extracted tweets about Covid19

10/28/2020, 6:50:14 PMnode: 4240e2f8.5d9b84tweets/davidou_29 : msg.payload : string[160]
"RT @Mediavenir: ⚡ FLASH - "Il faut des mesures fortes" contre la Hash tag COVID19 mais "il faut à tout prix" garder les Hash tag ecoles ouvertes par "néce..."
10/28/2020, 6:50:14 PMnode: 4240e2f8.5d9b84tweets/J18Reyno : msg.payload : string[212]
" Hash tag MAGA2020 Hash tagrealDonaldTrump Hash tag LincolnProject Hash tag 2020Election Hash tag COVID19 Hash tag COVIDIOTS Hash tag BlameTrump Hash tag RepublicansForBiden Hash tag GOP... see short URL "
10/28/2020, 6:50:14 PMnode: 4240e2f8.5d9b84tweets/ChrisDelliere : msg.payload : string[167]
"RT @TempoSante: Hash tag COVID19 : Emmanuel Macron annoncera ce soir à 20h de nouvelles Hash tag MesuresSanitaires qui pourraient aller jusqu'à un Hash tag Reconfi..."
10/28/2020, 6:50:14 PMnode: 4240e2f8.5d9b84tweets/rule_of_lois : msg.payload : string[149]
"RT @PedroMiretBetan: Esta mañana hemos estado visitando el Hotel Barcelona 505 de @CataloniaHotels, el cual se ha transformado en Hash tag HotelSal..."
10/28/2020, 6:50:14 PMnode: 4240e2f8.5d9b84tweets/ikhmal_pejak : msg.payload : string[140]
"RT @itspaans: Third wave melanda but yg disalahkn? Rakyat..❄️KKM xcukup dana but minta dekat siapa?❄️Rakyat..❄️Menteri disobey the SOP, rky..."
10/28/2020, 6:50:14 PMnode: 4240e2f8.5d9b84tweets/Cyp_thieff : msg.payload : string[29]
"RT @l__rotyxx: see short URL "
10/28/2020, 6:50:15 PMnode: 4240e2f8.5d9b84tweets/GROG__ : msg.payload : string[67]
"RT @saidelarbre: Mdr l'image "on prend la France on la confine à 2""
10/28/2020, 6:50:15 PMnode: 4240e2f8.5d9b84tweets/krishh61 : msg.payload : string[125]
"RT @KLubnauer: Prawie 19 tys nowych przypadków Hash tag covid19!❄️Czy będzie kolejne orędzie JARozelskiego o wojnie domowej?"
10/28/2020, 6:50:15 PMnode: 4240e2f8.5d9b84tweets/fefebaraonda : msg.payload : string[149]
"RT @ksnt63: Saranno tutti negazionisti, ma qui a Hash tag Milano vedo crescere in modo esponenziale mascherine FPP2❄️Ma come mai, se è così "innocuo..."
10/28/2020, 6:50:15 PMnode: 4240e2f8.5d9b84tweets/punkpuffin : msg.payload : string[140]
"RT @ProfPMiddleton: An @itvnews journalist has just admitted to using the @scotgov report into hospital discharge to care homes in a grotes..."
10/28/2020, 6:50:15 PMnode: 4240e2f8.5d9b84tweets/francusu : msg.payload : string[149]
"l'esperienza diretta di Hash tag massimogiannini, ricoverato per Hash tag covid, racconta una realtà molto seria e molto diversa da... see short URL "
10/28/2020, 6:50:15 PMnode: 4240e2f8.5d9b84tweets/arual812 : msg.payload : string[168]
"RT @lucarango88: 📊Record Hash tag Veneto Hash tag 28ottobre Hash tag Covid_19 ❄️Positivi +2.143 (+617)❄️Tot 49.135 (+4,56%)❄️Tamponi +16.083 (+17,5%)❄️Tot 2.275.869 (..."
10/28/2020, 6:50:16 PMnode: 4240e2f8.5d9b84tweets/luca_cangemi : msg.payload : string[140]
"Una volta la borghesia sapeva scegliere i propri medici di fiducia, uno come Hash tag Zangrillo dimostra che adesso neanche... see short URL "
10/28/2020, 6:50:16 PMnode: 4240e2f8.5d9b84tweets/audreysdi31 : msg.payload : string[19]
"t'entends ça macron"
10/28/2020, 6:50:16 PMnode: 79254ed2.754288msg : string[45]

Node-RED interface showing a workflow for sentiment analysis of tweets. The workflow includes nodes for listening to a Twitter feed, processing tweet details, removing URLs and replacing hashtags, and calculating sentiment scores. The output is displayed in the debug console.

Workflow Steps:

- Pick a #hashtag to follow (e.g., #Covid19)
- Listen to twitter feed
- msg tweet details
- msg tweet text
- Remove URLs and replace #
- msg payload
- Happy test, Sadness test, Angry test (used for testing)
- set msg tweet
- Sentiment of Tweets
- msg sentiment score
- Positive / Negative Tweets
- Positive Tweet debug
- Retweet positive tweets
- SMS to Phone
- Negative Tweets
- limit 1 msg/10s (2224)
- Store Tweet data
- tweetdata
- set msg payload
- text
- change 2 rules
- Sentiment
- Tweet Sentiment History

Debug Console Output:

```

10/28/2020, 6:40:45 PM node: 4240a295.5d0b84
tweets/prigtravian: msg.payload: string[140]
"RT @HCL: With the onslaught of Hash tag COVID19, we have been through many uncertainties in our life. But we need to make our best effort to ensure..."

10/28/2020, 6:40:45 PM node: 4240a295.5d0b84
tweets/fuiscanova: msg.payload: string[140]
"RT @Serenad7: En la mayoría de CAPs y CUAPs de la ciudad se hacen desde esta semana. Además, ahora, se harán también para cribaje de contagio..."

10/28/2020, 6:40:45 PM node: 4240a295.5d0b84
tweets/hoodie_Weather_: msg.payload: string[150]
"RT @pollisopolitics: Who do you Trust to Fix Hash tag America's Economy from the damage Hash tag COVID19 did, @JavBiden, @JorgensenPOTUS or @realDonaldTrump..."

10/28/2020, 6:40:45 PM node: 4240a295.5d0b84
tweets/lopusu2: msg.payload: string[150]
"RT @politicomx: Hash tag LasViejasPRIX | @JauVila dio a conocer que este martes amaneció con síntomas de Hash tag COVID19, por lo que optó por aislarse y..."

10/28/2020, 6:40:45 PM node: 4240a295.5d0b84
tweets/famad77: msg.payload: string[140]
"RT @humanite_fr: Le directeur général de Hash tag OMS a appelé à maintenir l'épidémie sous contrôle, à la suite de déclarations inquiétantes du che..."

10/28/2020, 6:40:45 PM node: 4240a295.5d0b84
tweets/RACurtisSantha1: msg.payload: string[31]
"RT @ItsOverflowOk: @jeffzeleny ."

10/28/2020, 6:40:45 PM node: 4240a295.5d0b84
tweets/veia150: msg.payload: string[140]
"RT @OathosBD: CORONAVIRUS Hash tag COVID19 Ministerio de Sanidad, 23 de octubre, comunica 3.695 casos importados"

```

Web interface for sentiment analysis. The interface includes a text input field, a "Default" button, and a "Sentiment" section displaying a gauge chart for the sentiment score.

Text Input: Enter Text

Default: text, tweet.text

Sentiment: sentiment.score

Tweet Sentiment History:

The gauge chart displays a sentiment score of approximately 5 units, with a range from -10 to 10 units.

