

Opporture

<https://article.inve.ca>

Introduction



- Opporture leverages cutting-edge Artificial Intelligence (AI) to deliver unbiased and insightful news content.
- Our platform provides a range of services including content moderation, tagging, labeling, and data annotation
- By integrating advanced AI techniques, we ensure that our news articles offer a well-rounded and unbiased perspective.
- **AI-Powered News Aggregation:** We collect data from a variety of sources using News APIs, including Connexun, Gnews and RSS feed urls.
- **Topic Generation and Article Creation:** OpenAI is utilized to generate relevant topics by doing similarity search on news and then create topics based on the aggregated news content. This process is complemented by prompt engineering to refine the system's input and ensure high-quality content creation.
- **Sentiment Analysis:** Natural Language Processing (NLP) techniques are employed to analyze the sentiment of each news piece, helping us produce articles that reflect a balanced and thoughtful view of the news.
- **AWS Integration:** The integration of AWS Lambda and S3 buckets allows us to efficiently fetch, store, and process this data.
- **Containerization and Hosting:** We use Docker for containerizing and the application is hosted on an AWS EC2 instance, providing scalable computing resources to handle varying loads and ensure high availability.

Application Flow



- User interacts with the dashboard application's frontend, triggering a request.
- Backend processes the request and either fetches data from the MongoDB database or triggers AWS Lambda functions based on specific conditions.
- AWS Lambda functions fetch data from respective third-party APIs(Connexun, Gnews, RSS) ,save raw data to AWS S3 bucket, and sends data to AWS queues.
- ActiveMQ receives the data and triggers another lambda for data processing.
- Lambda adds additional information to the data and stores it in MongoDB using Mongoose ODM.
- Processed data is now available in the MongoDB database for retrieval and display in the MERN application.
- Topics get created using OpenAI for similar news pieces by doing similarity search first. Similar news assigned under a common topic.
- User will process to create mega article based on the generated topics.
- Prompts are generated and passed to OpenAI again to create summarized content for news article.
- Sentiment analysis and emotional analysis also performed based on the generated article content using wink-NLP and pyplutchik package respectively.
- Next, Title, TLDR, SEO Title and SEO Description gets generated using OpenAI for the articles.
- Once the article is fully generated it can be published on <https://article.inve.ca/> site for end users to view unbiased news.

News Feed

News Feed

Filter +

* Planet Earth Reaches Unprecedented Highs: Urgent Action Needed to Combat Climate...

Global Average Temperature Surpasses Record Highs, Experts Warn of Uncharted Climate Territory Monday was recorded as the hottest day ever...

L 0.00% · C 100.00% · R 0.00% * 19 days ago

Canada, France, Germany and more ...

Netanyahu's Congress Speech: Sparking Debate on U.S.-Israel Alliance and Gaza...

Netanyahu's Congress Address: U.S.-Israel Alliance, Gaza Conflict, Global Repercussions Israeli Prime Minister Benjamin Netanyahu's recent address t...

L 80.00% · C 20.00% · R 0.00% * 19 days ago

United States, Iran, Yemen and more ...

Title: "Financial Evolution: AI Adoption and Leadership Changes at Binance FZE

Central Banks Embrace AI for Financial Innovation Key Points: X Open Hub's CEO, Michal Copiuk, discusses AI developments....

L 0.00% · C 100.00% · R 0.00% * a month ago United Arab Emirates

Shania Turin's Triumph Over Lyme: A Resilient

News Feed

News Feed

News Feed

News Feed

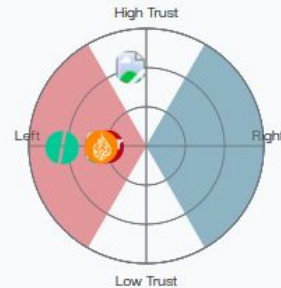
News Feed

Top Stories

Netanyahu's Congress Speech: Sparking Debate on U.S.-Israel Alliance and Gaza Conflict

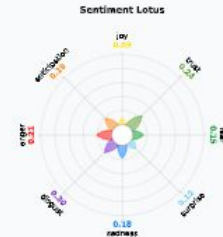
19 days ago United States, Iran, Yemen and more ... NegativeOutlook

Bias Score



L 80.00% · C 20.00% · R 0.00%

Emotional Score



Summary

- Netanyahu's address to Congress focused on U.S.-Israel alliance and Gaza conflict
- He called for "total victory" in the war, drawing support from Republicans but boycotts from Democrats



Environment

↶ Back

Planet Earth Reaches Unprecedented Highs: Urgent Action Needed to Combat Climate Change

🕒 19 days ago • 🌐 United States, Japan, Antarctica and more ... 📉 Negative Outlook

TL;DR

- Global average temperature reached record highs, surpassing previous records
- Experts warn that human-caused climate change is driving extreme temperatures
- Calls for urgent global action to combat climate change and transition to renewable energy
- Planet is entering uncharted territory in terms of climate conditions, immediate action needed to prevent irreversible damage

Monday was recorded as the hottest day ever globally, beating a record set the day before, as countries around the world from Japan to Bolivia to the United States continue to feel the heat, according to the European Climate Change Service.

Provisional satellite data published by Copernicus on Wednesday showed that Monday broke the previous day's record by 0.06 degrees Celsius (0.1 degrees Fahrenheit). Climate scientists say the world is now as warm as it was 125,000 years ago because of human-caused climate change. While scientists cannot be certain that Monday was the very hottest day throughout that period, average temperatures have not been this high since long before humans developed agriculture.

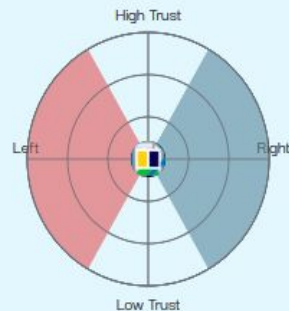
Environment

Environment

Environment

Information Center

📊 Bias Score ⓘ



📊 L 0.00% · C 100.00% · R 0.00%

Left

Center

Right

No news article

* Emotional Score



Mentioned



CMS Dashboard - Fetched News

Dashboard ▾ Users ▾ Charts & Stats ▾ Source APIs ▾ Mega Article ▾ Countries ▾ Finance ▾ AWS ▾ Config ▾



News Items

1,000,775 News

Search News



Filters:

Sentiments ▾

Source ▾

Source Nationality ▾

Country ▾

Language ▾

Category ▾

Date Range ▾

News API ▾

Clear

Apply

S.No	Title	Source	Description	Published At	Actions
1	Richard Carapaz, Alexander Cepeda, Jhonatan Narváez y Martin López disputarán la Vuelta a España	aficioncentral.com	Los ecuatorianos apuntan a tener protagonismo en la última grande del ciclismo en la temporada.	Aug 13, 2024 21:52:37	
2	Obsèques du prince Philip : seulement 15 invités autorisés à assister à la veillée	gala.fr	30 invités auront le droit d'entrer à la chapelle Saint-George pour les obsèques du prince Philip ce ...	Aug 13, 2024 21:50:47	
3	Attentats en Espagne: Patrick Bruel, Marine Lorphelin... Les hommages des stars françaises aux victimes	gala.fr	Au lendemain de la terrible attaque terroriste qui a frappé le centre ville de Barcelone, plusieurs p...	Aug 13, 2024 21:50:46	
4	Pourquoi les funérailles du prince Philip vont raviver la douleur de William et Harry?	gala.fr	Les obsèques du prince Philip ont lieu samedi 17 avril prochain, un moment douloureux pour les prince...	Aug 13, 2024 21:50:39	



CMS Dashboard - List of News Sources



News Sources

7,837 News Sources

Add Source

Filters:

Source Status ▾
Feed Status ▾

Source Nationality ▾

Source Language ▾

Date Range ▾

Apply

Clear

S.No	Source Name	Source Title	Source Nationality	Languages	Feed Status	Published Date	Actions
1	aficioncentral.com	NA	Ecuador	Spanish	Not Added	Aug 13, 2024 21:52:37	
2	gala.fr	NA	France	French	Not Added	Aug 13, 2024 21:50:47	
3	irishtimes.com	NA	Ireland	English	Not Added	Aug 13, 2024 21:43:7	
4	mdzol.com	NA	Argentina	Spanish	Not Added	Aug 13, 2024 21:42:43	
5	semana.com	NA	Colombia	Spanish	Not Added	Aug 13, 2024 21:39:11	



CMS Dashboard - Topics gets assigned to common news from different sources

Dashboard ▾ Users ▾ Charts & Stats ▾ Source APIs ▾ Mega Article ▾ Countries ▾ Finance ▾ AWS ▾ Config ▾



Trending

1

Source Nationality ▾

- > Rising Threat of Mutating Monkeypox Outbreak in Congo Sparks Global Health Concerns Aug 13, 2024 22:22:3
- > Freddie Flintoff's Top Gear Crash: Battling Anxiety and Nightmares - The Resilience Journey Aug 13, 2024 22:22:0
- > President Tinubu Enacts 300% Salary Increase for Judicial Officers: A Landmark Milestone in Nigeria's Justice System Aug 13, 2024 22:21:58
- ▾ FlexTV Ranks No. 7 in App Store: Mega Matrix's Global Success Story Aug 13, 2024 22:21:53
 - > Mega Matrix announced that FlexTV App achieved the new milestone, surging into Top 8 on the Apple Store Entertainment Ch - [Jul 26, 2024 16:55:19] apnews.com
 - > Mega Matrix Announces FlexTV's Surge to Top 7 on the App Store's Entertainment Chart (Free Apps, France) as of July 31, - [Jul 31, 2024 12:47:18] taiwannews.com.tw
 - > Mega Matrix Announces FlexTV's Surge to Top 8 on the App Store Entertainment Chart (Free Apps, South Korea) as of August - [Aug 13, 2024 17:12:11] taiwannews.com.tw
- > Nigeria's Push for Naira Crude Sales: Economic Boost or Hurdles Ahead? Aug 13, 2024 22:21:52
- > Minnesota Vikings Quarterback J.J. McCarthy Sideline with Torn Meniscus, Season Status Uncertain Aug 13, 2024 22:21:48



CMS Dashboard - Process to generate mega article from topics



Mega Article



Article Topic

2

News Items

3

Article Characters

4

Article

5

Title & Meta

6

Citation

7

Source Bias

8

Review Article

Mega Article Topic

Article Topics

1,865 Topics

Filters:

Apply

Clear

Tragic Disappearances: Brit Falls Overboard on Cruise, Hiker Lost in Pyrenees - Desperate Searches Called Off | | [nypost.com...](#)+2 articles

Aug 14, 2024 15:52:31 | 1 hour ago

Queen's Final Balcony Appearance: A Testament to Royal Duty and Charles' Encouragement | | [mirror.co.uk...](#)+3 articles | Aug 14, 2024 15:52:28

1 hour ago





Article Topic



News Items



Article Characters



Article



Title & Meta



Citation



Source Bias



Review Article

Article Characters

Reset

Temperature ?

Reset

Select Prompt ▼

System Prompt ?

I want you to act as a journalist. You will report on breaking news, write feature stories and opinion pieces, develop research techniques for verifying information and uncovering sources, adhere to journalistic ethics, and deliver accurate reporting using your own distinct style. ✕

281

Human Prompt ?

Context: You have received chunks of articles as input documents. ✕

Action: Taking inspiration from those input documents, write a 2000-character newspaper article that summarizes them. Make sure that the summary is of 2000 characters.

Tone: polite and neutral

Edit News Content



You can reference the fulltext of each news item in the Human Prompt by using the hashtag symbol (#) followed by the news item numeric ID (e.g. #3)

> #1 The Tesla Diner might actually be happening



techcrunch.com

Aug 13, 2024

12 hours ago

> #2 Tesla posts job listing for the 1950s-style diner Elon Musk has proposed building



techcrunch.com

Aug 13, 2024

12 hours ago

CMS Dashboard - Graphical representation of data



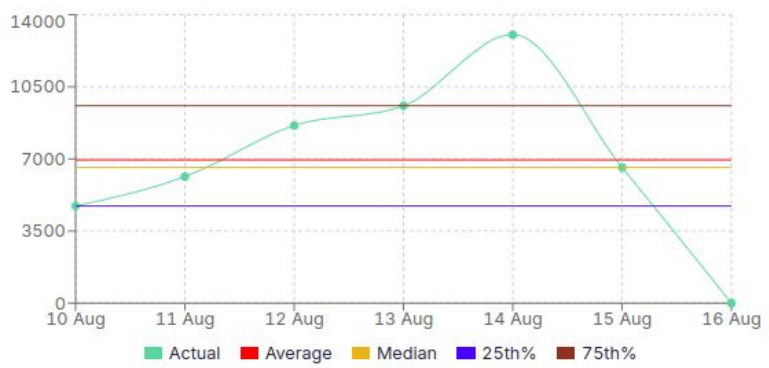
General Line Charts

Filters:

- Sentiments ▾
- Source ▾
- Source Nationality ▾
- Country ▾
- Language ▾
- Category ▾
- Date Range** ▾
- News API ▾
- Clear
- Apply**

News Per day

- Average
- Median
- 25th%
- 75th%



News Per Day Count Table

Date	News Counts
10 Aug	4715
11 Aug	6141
12 Aug	8618
13 Aug	9581
14 Aug	13026

Statistics

Average	6952.857
Median	6589
25th %	4715
75th %	9581



Tech Stack

Technology	Version	Description
React	18.2.0	Used for website front end related tasks.
Node JS, Express JS	18.20.2, 4.18.2	Used as backend, handles API requests and database interactions.
MongoDB	7.1.1	MongoDB is used as a primary database, connected and modeled using Mongoose ODM for structured data storage.
OpenAI, ChatGPT	4.12.4, gpt-3.5-turbo-0125	To generate Topics and Mega Article content
Active MQ	-	Used for the data flow from one lambda to another for processing .
AWS Services(Lambda, S3 bucket)	-	Used for fetching data from third-party APIs, processing data, and storage of raw data for easy access.