



<hacker-ramp/>

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**Team Members:**

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**Use Case :** Trend Identification

# Problem - Trend Identification

Gen Z sets the trends, but predicting their ever-evolving styles is a challenge.

- Traditional methods rely on historical data, missing the **rapid shifts in Gen Z preferences**.
- There is a need for a more efficient, data-driven approach to identify and **rank fashion trends in real-time**.

## SCALE

The global fashion industry is valued at over **\$2.5 trillion**, with **social media** playing a significant role in shaping consumer behavior. Over **1 billion** users engage with fashion content on platforms like Instagram monthly, making it essential to analyze this wealth of data to identify trends accurately. By tapping into the insights from these platforms, our project seeks to serve various stakeholders, including:

- **Fashion Brands** looking to understand market demands.
- **Designers** seeking inspiration from trending items.
- **Retailers** aiming to stock popular products.
- **Consumers** wanting to stay updated on fashion trends.



HARVARD POLITICAL REVIEW

Monday, July 15, 2024

COVERS IT'S ONLY A MATTER OF TIME SHORT FORMS

**The Influencer Revolution: Increased Accessibility & Super Fast Fashion**

By Nurayn Khan August 27, 2023



Share



## IMPACT

### Financial

Reducing excess inventory

Optimizing production runs

Maximizing Sales

### Environmental

Lower production waste

More sustainable practices

Accurate Forecasting

### Social

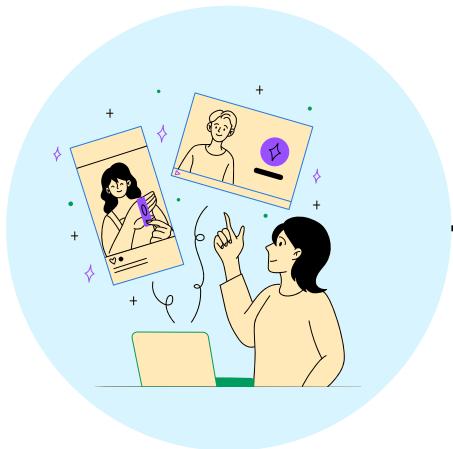
Catering to Gen Z's desire for unique and sustainable fashion can enhance their shopping experience and brand loyalty towards Myntra.



# Solution

We're developing an AI-powered solution that leverages **data analytics**, **market research**, and **real-time data** to **Identify emerging fashion trends** popular with Gen Z through-

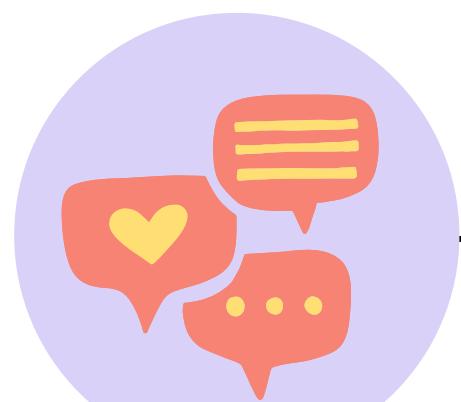
## 1. Social media metrics



**Image Analysis**  
Using Gemini Vision Pro Model

- Extract attributes such as -
- Type of item
  - Color
  - Brand
  - Fit
  - Occasion
  - Length etc.

## 2. Image analysis



**Web Scraping**  
Using Selenium based scraper

- Retrieve details like-
- Count of comments
  - Count of likes
  - Data Posted



**NLP**  
Using spaCy model

- Identify key trends and themes mentioned in the reports

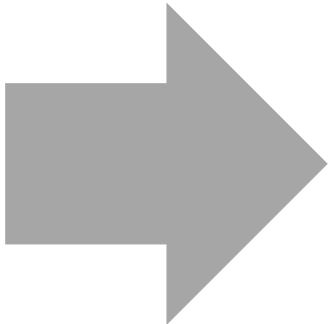
## 3. Natural Language Processing

- 1 Frilly Saree
- 2 Crop-Jacket
- 3 Boiler Suit
- 4 Maxie
- 5 Denim Shirt

Assign **Trend Scores** to each source then **normalize** each score for consistent ranking system

# Solution

## IMAGE ANALYSIS USING GEMINI VISION PRO

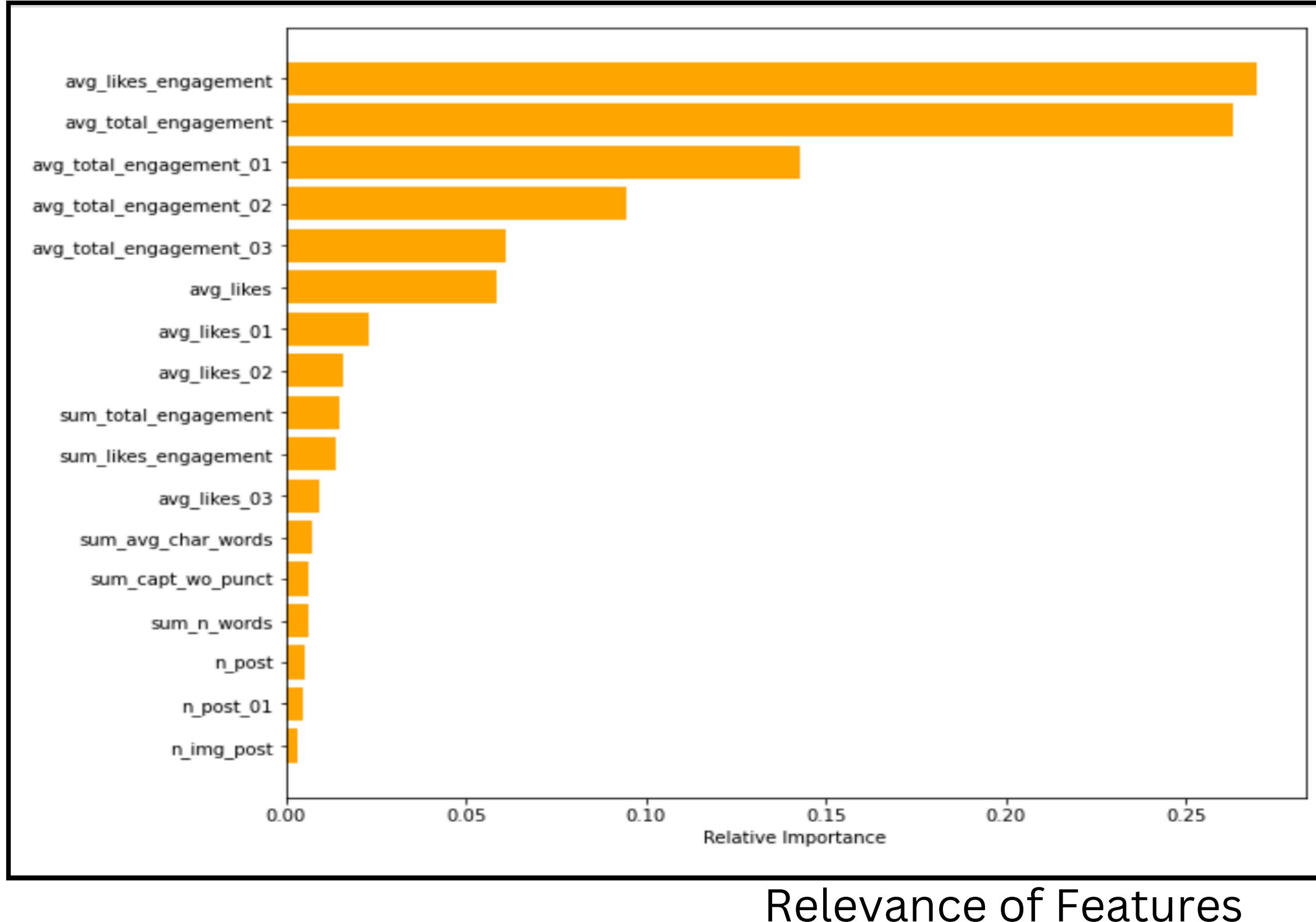


Category	Pattern	Major Color	Neckline Shape	Sleeve Length
...	...	...	...	...
Cardigan	✓ Floral	Blue	Bateau	✓ No sleeve
✓ Dress	Graphics	Gray	Court	Short sleeve
Pants	Plaid	Green	Cowl	Long sleeve
Shirt	Solid	Purple	✓ Scoop	
Skirt	Striped	✓ White	Strapless	

Attribute Recognition of Influencers' Picture

# Solution

## ENGAGEMENT LEVEL ANALYSIS USING SCRAPER



Likes Engagement =  $\frac{\text{Count of Likes}}{\text{Followers}} \times 100$

Comments Engagement =  $\frac{\text{Comments Count}}{\text{Followers}} \times 100$

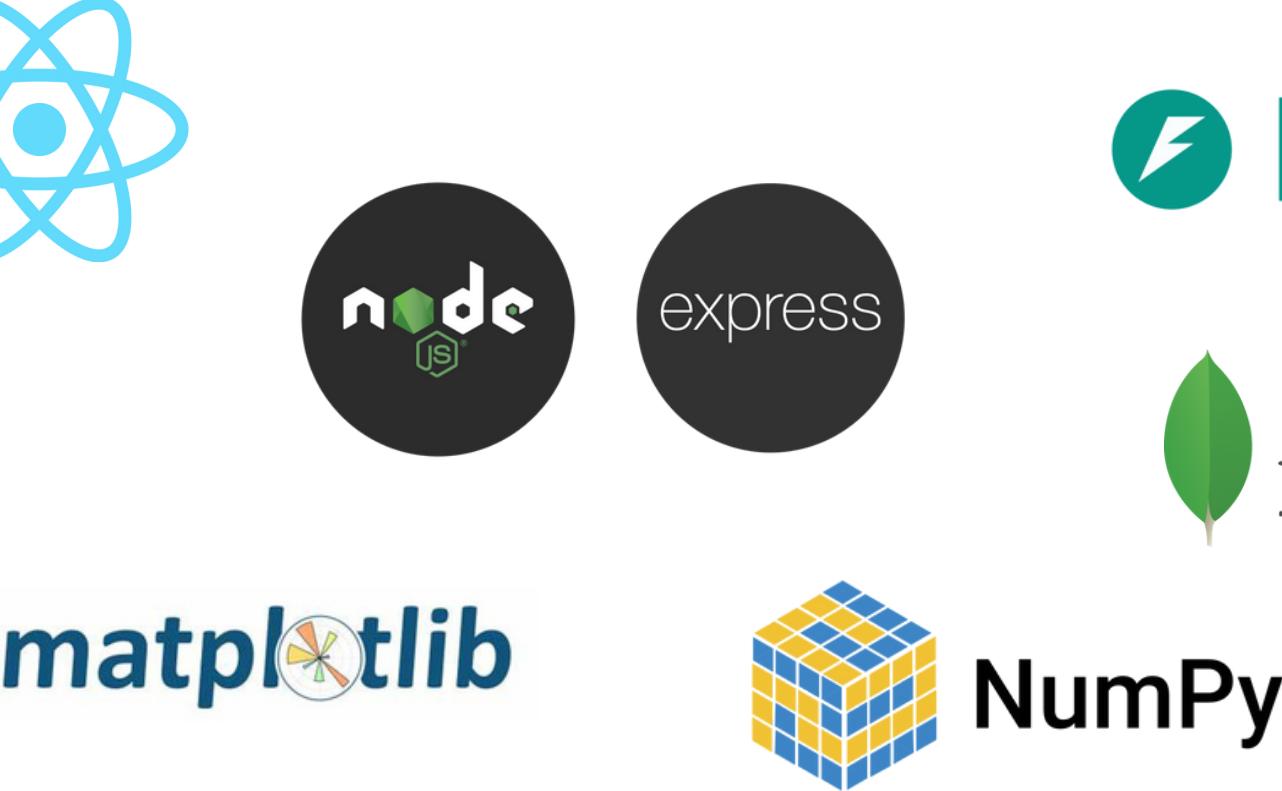
Total Engagement = Likes Count  
+  
Comments Count

# Tech Stack

**Frontend :**  
React Js  
SCSS  
Material UI  
Figma



**Backend :**  
Node Js  
Express Js  
Mongo DB  
Rest API  
JWT tokens  
Postman



**Machine Learning :**  
SpacyNERv3  
FastAPI  
Gemini Vision Pro  
Selenium

