

Criteo Innovation Academy

ESCP x Criteo Hackathon 2022

Feb. 11, 2022

For general questions

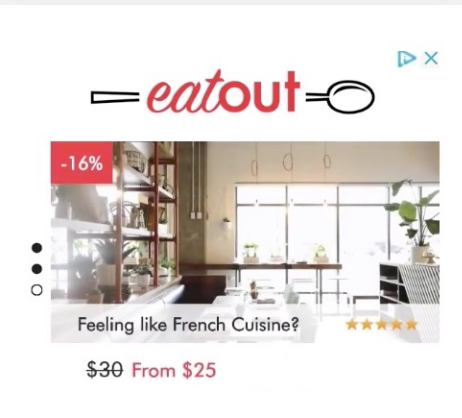
Matthieu Martin, mat.martin@criteo.com

Liva Ralaivola l.ralaivola@criteo.com



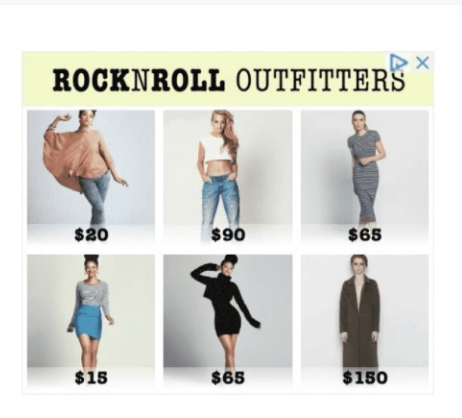
CRITEO

Criteo: a key tech player in AdTech



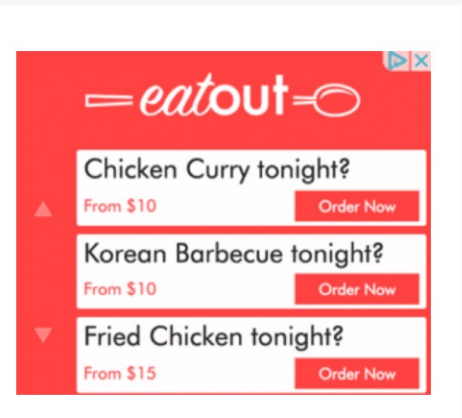
The single ad for 'eatout' features a large image of a restaurant interior. Text includes '-16%', 'Feeling like French Cuisine?' with five stars, and '\$30 From \$25'. A small 'x' icon is in the top right corner.

SINGLE



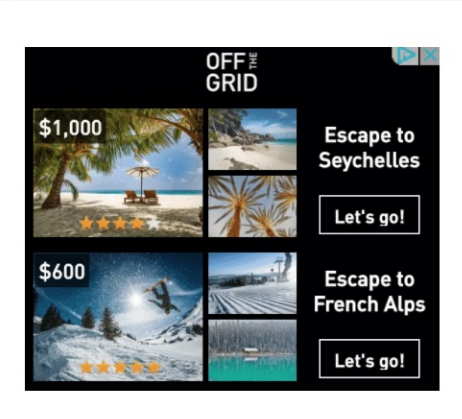
The mosaic ad for 'ROCKNROLL OUTFITTERS' displays a grid of six clothing items with their prices: \$20, \$90, \$65, \$15, \$65, and \$150. A small 'x' icon is in the top right corner.

MOZAIC



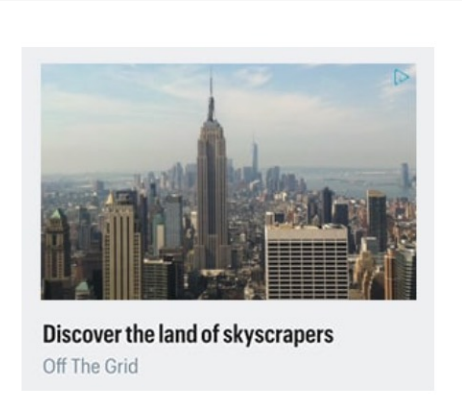
The read ad for 'eatout' has a red background and lists three menu items: 'Chicken Curry tonight? From \$10', 'Korean Barbecue tonight? From \$10', and 'Fried Chicken tonight? From \$15'. Each item has an 'Order Now' button. A small 'x' icon is in the top right corner.

READ



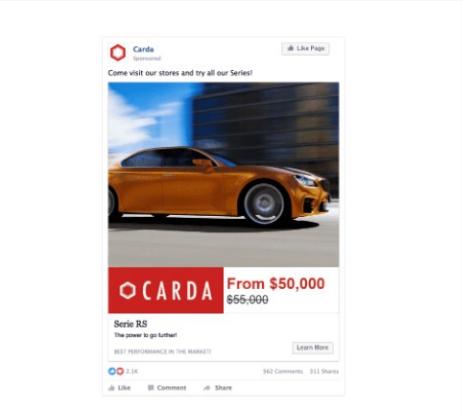
The collection ad for 'OFF THE GRID' shows a grid of four travel images. Text includes '\$1,000', 'Escape to Seychelles', 'Let's go!', '\$600', 'Escape to French Alps', and 'Let's go!'. A small 'x' icon is in the top right corner.

COLLECTION



The native ad for 'Off The Grid' features a large image of a city skyline with the Empire State Building. Text includes 'Discover the land of skyscrapers' and 'Off The Grid'. A small 'x' icon is in the top right corner.

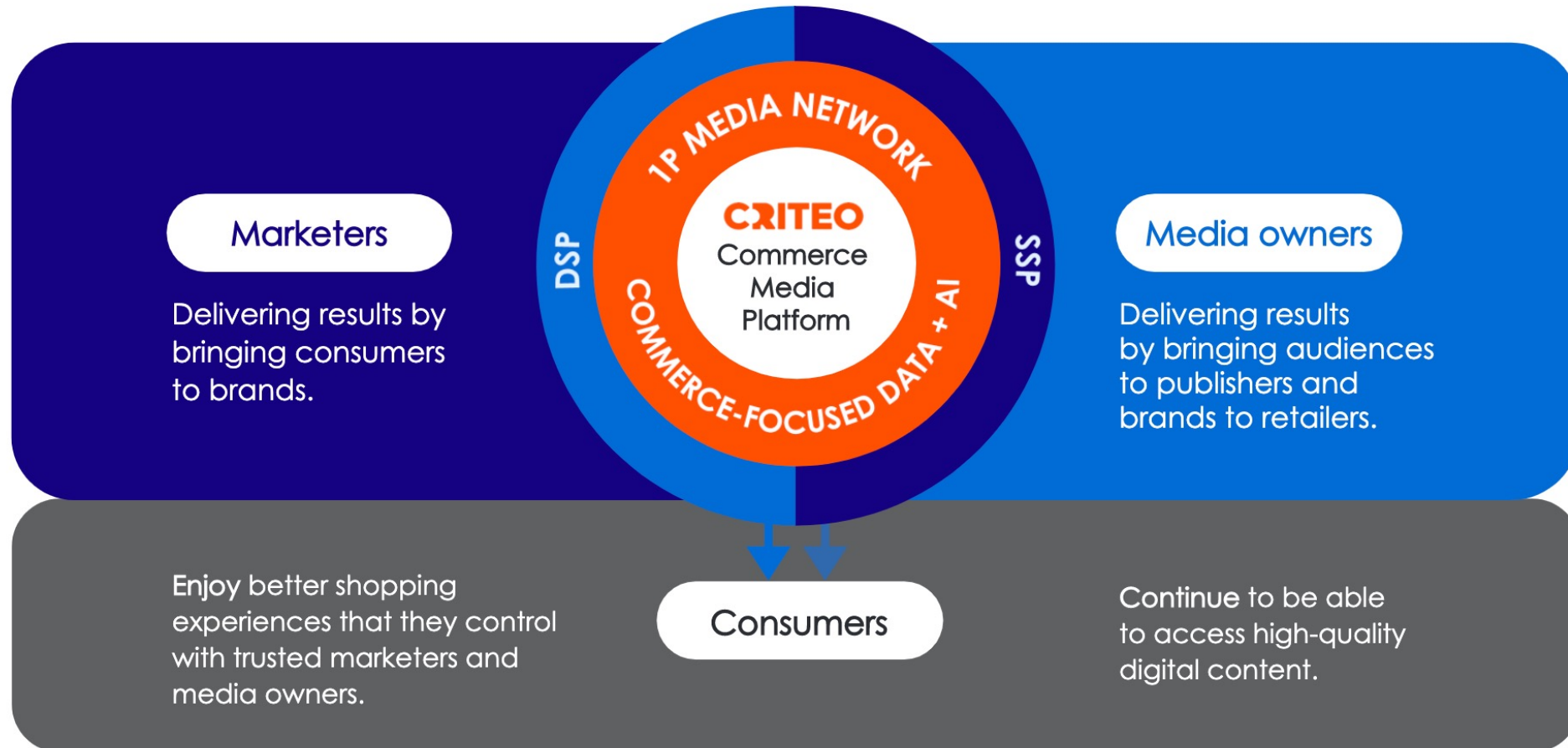
NATIVE



The social ad for 'Carda' shows a yellow sports car. Text includes 'Come visit our stores and try all our Series!', 'CARD A From \$50,000', and 'Series RS The power to go further!'. It also displays social media engagement metrics like '362 Comments' and '311 Shares'. A small 'x' icon is in the top right corner.

SOCIAL

Commerce Media Platform for the Open Internet



650m daily active users, thousands of publishers, 35B daily browsing and buying events

The background is white and filled with various abstract shapes. There are several thick orange curved lines and some solid orange circles. There are also several light blue rounded rectangular shapes and some thin orange outlines of circles and elongated shapes.

Hackathon projects

CRITEO

1 business project + 2 data heavy projects

Projects from Research x Analytics at Criteo

A new campaign format for the (2024) Olympic Games.

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Fake news detection.

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Brand sentiment analysis.

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A. Lumbreras - Staff Research Scientist, *a.lumbreras@criteo.com*

Projects

Criteo Innovation Academy

New Ad Formats and Campaign for the Olympics

Feb. 11, 2022

For general questions

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Context: Paris 2024... and other big events



Advertising everywhere: in the street, radio, TV, web, mobiles...

The challenge

Propose a new ads format for such big events

Leveraging Criteo assets

- Ability to process and learn from billions of data
- A toolset of Machine Learning methods: AI product generation, AI-based image processing, automated pricing...

Making use of as many devices as possible (x-device campaigns)

- Digital billboards (cf. buses, Time square, underground, TGV), TV, Web, radio, etc. Physical and Virtual
- Less used support/technologies: non-intrusive audio ads, 5G, Argo technology (<https://ar-go.co/fr/>)

And, more importantly:

- Allow advertisers to have as target ads as possible given only contextual info
- Make people engage with the brands and products
- Come with a business model (consumer / marketer / media owner / Criteo)

Bonus: advertising 2.0 and happenings

Advertising 2.0

- Have the consumer be part of the campaigns (not only as a consumer but also as a maker... cf. Product Gen)
- Have campaigns be interactive (à la 'Criteo Go')

Happenings: leading up to the OG

- Present one use case of your new add format end of 2022
- Present one use case of your new add format end of 2023
- Present one use case of your new add format just before the start of the OGs

And, again: say how/what/when data are collected and leveraged

The background is white and filled with various abstract shapes. There are several thick orange curved lines and one thick orange circle. There are also several light blue shapes, including circles, rounded rectangles, and elongated capsules. Some of these shapes are outlined in orange, while others are solid. The overall composition is dynamic and modern.

Good luck

CRITEO

Hackathon ESCP 2022

Fake News

Contact info:

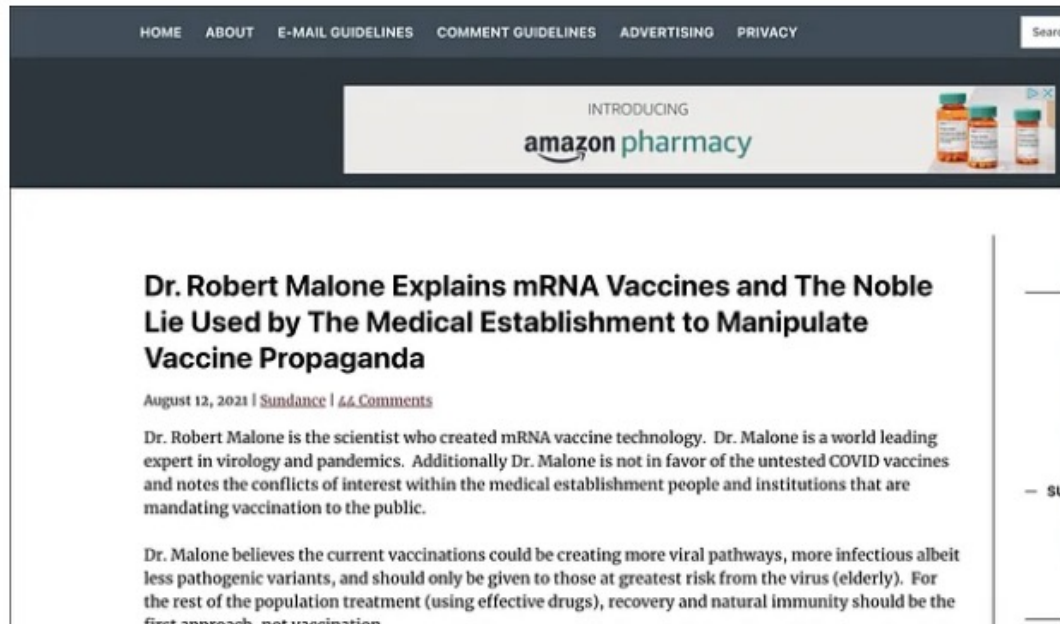
{t.becker, j.mary, a.vanhuele}@criteo.com



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Why ?

Ad-funded disinformation and fake news is becoming a huge risk for advertisers.



An advert for Amazon Pharmacy on a conspiracy theory site

Sources: <https://www.statista.com/topics/3251/fake-news/#dossierKeyfigures>

<https://www.iab.com/wp-content/uploads/2020/12/IAB Brand Safety and Suitability Guide 2020-12.pdf>

<https://www.thebureauinvestigates.com/stories/2021-09-18/big-brands-advertising-fuelling-covid-misinformation-websites>

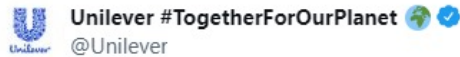
69%

Level of confusion caused
by fake news about the
basic facts of current issues
and events in the US

26%

Adults in the US are very
confident into distinguishing
between real news and fake
news

What is at stake?



We have taken the decision to stop advertising on @Facebook, @Instagram & @Twitter in the US.

The polarized atmosphere places an increased responsibility on brands to build a trusted & safe digital ecosystem. Our action starts now until the end of 2020.

bit.ly/3i78mmQ



6:47 PM · 26 juin 2020



AD TECH

PubMatic Teams Up With NewsGuard to Implement Additional Brand Safety Measures



Patagonia is proud to join the Stop Hate for Profit campaign. We will pull all ads on Facebook and Instagram, effective immediately, through at least the end of July, pending meaningful action from the social media giant.

12:32 AM · Jun 22, 2020



Sources:

<https://www.bbc.com/news/technology-53137877>

<https://www.adweek.com/programmatic/pubmatic-teams-up-with-newsguard-to-implement-additional-brand-safety-measures/>

ML-oriented tasks & ideas

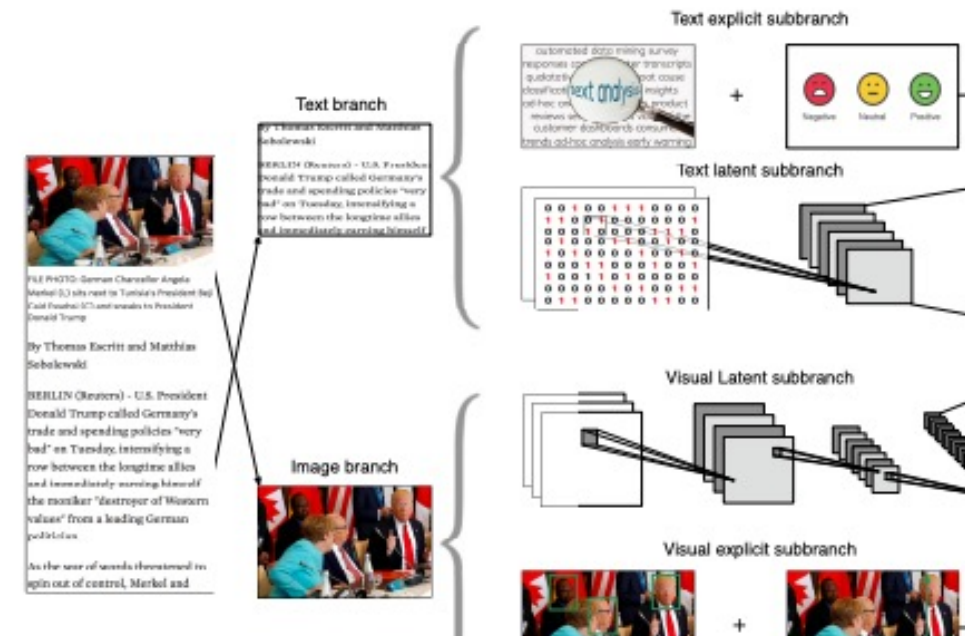
Classification model leveraging NLP, Computer Vision or Graph models

Sample of topics you can consider:

- Train an NLP model to detect fake news (e.g., fine-tuning a BERT for classification)
- Build a model on top of our current topic analysis model
- Work on co-occurrences of some images (or similar images) on websites to detect fakes news
- Aggregate sources of fake news (maybe monitoring some twitter accounts)

What can we provide?

- A list of websites with a few hundred human labelled as well as a test set (to build a final metric)
- Help to crawl and scrap websites



Product-oriented tasks & ideas

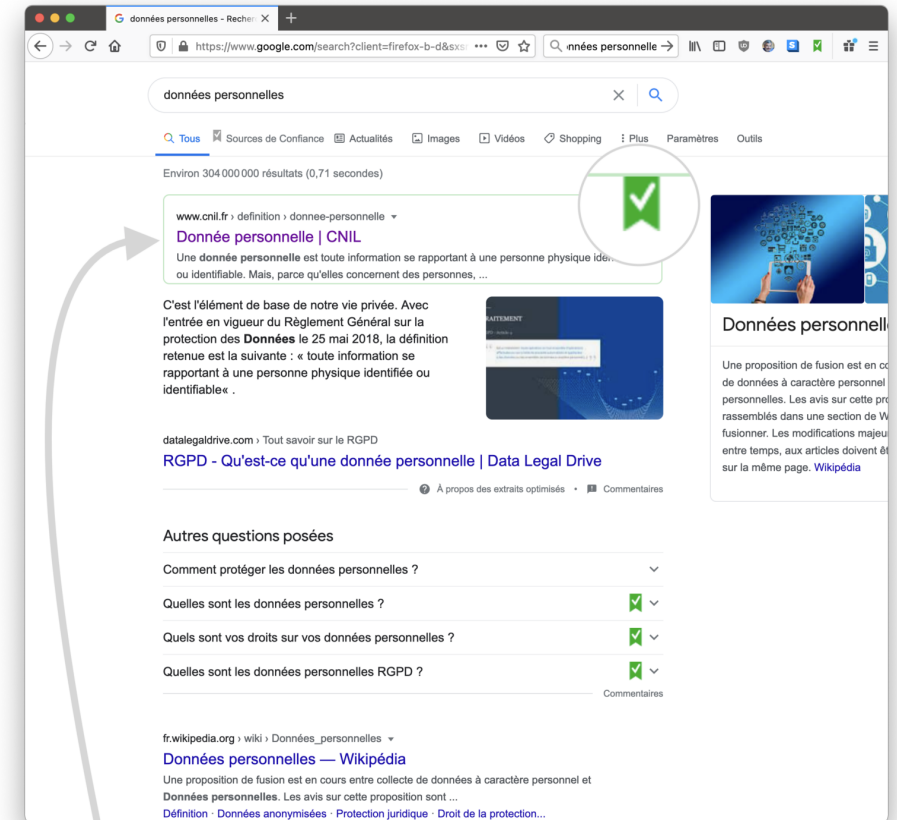
Widget creation, visualization tools, commercialization of a prediction model

Sample of topics you can consider:

- Build a business model (including human tagging and possible final consumers)
- Produce some nice displays on websites such as done by <https://www.sources-de-confiance.fr/> for public institutions
- Produce some awesome visualizations

What can we provide?

- Our domain-level fake news scores (noised)



Brand sentiment analysis : the context



Criteo wants to offer a brand analysis service to its clients during the 2024 Paris Olympic Games

Such service would help our clients to **better understand online users' behavior** and allow us to better:

- Choose the right audiences to target
- Target the users at the right time
- Collect even more insights about our partners brand & products

Brand sentiment analysis : the challenge

Given a brand name, are you able to :



- Collect **online data** related to this brand



- Perform an online **sentiment analysis** about the brand



- Report your results on **several dimensions** (ex : hour of the day, geolocation, online communities, any relevant one : be creative !)

Brand sentiment analysis : expected output



Build a pipeline to automatically collect, from the source of your choice, relevant data associated with any brand



Train a model evaluating the sentiment associated with the brand and explain why you selected this model



Create some nice visualizations to highlight your findings