

SOLUTION INNOVANTE : l'IA a portée d'API via Algolia



**Xavier
Durieux**

Strategic Account Executive - Algolia



**Simon
Sawada**

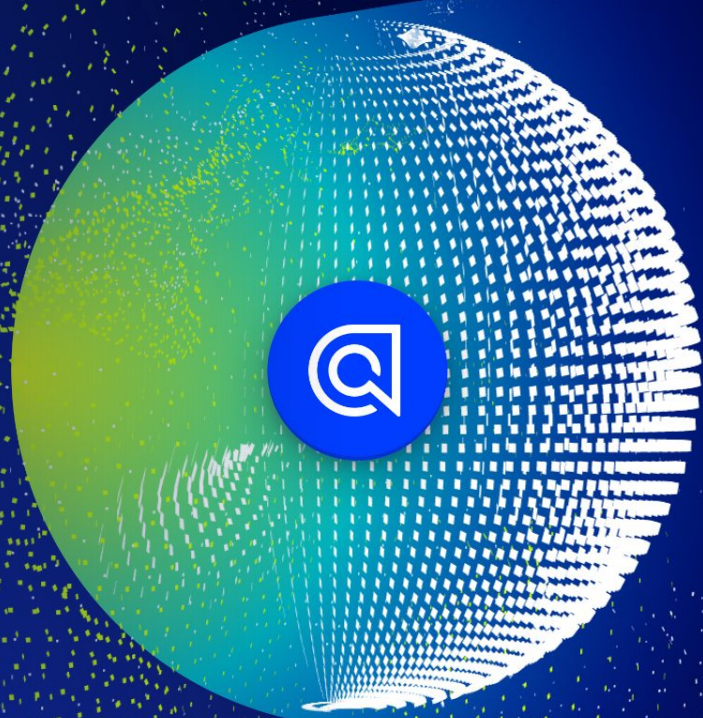
Team Lead, Solutions Engineering EMEA
South



Comment utiliser l'IA pour transformer le retail

SIMON SAWADA | Team Lead Solutions Engineering

XAVIER DURIEUX | Strategic Account Manager



Agenda



Xavier Durieux

Strategic Account Manager

xavier.durieux@algolia.com



Simon Sawada

Team Lead, Solutions Engineering

simon.sawada@algolia.com

- 1 Présentation d'Algolia
- 2 L'IA chez Algolia
- 3 Exemple d'IA : Decathlon

01

Présentation d'Algolia

Présentation d' Algolia

Algolia propose une plateforme AI pour
optimiser l'expérience de recherche et de navigation des sites web

- **+17,000** clients
- **+850** employé(e)s
- **\$334 millions** levés pour une valorisation de **\$2.2B**
- **31 milliards** de recherches gérées par jours
- **1** internaute sur **6** dans le monde **utilise Algolia** sans le savoir



Algolia et l'AFM



Clients d'Algolia faisant partie de l'AFM



Plus de 17,000 marques font confiance à Algolia



Rapid innovation with Search-as-a-Service



02

L'IA chez Algolia

Value

What people
expect



Content finds
everyone in moments
that matter

The Bar Keeps Getting Higher

Today
Begin your
discovery journey



The experience
you provide today

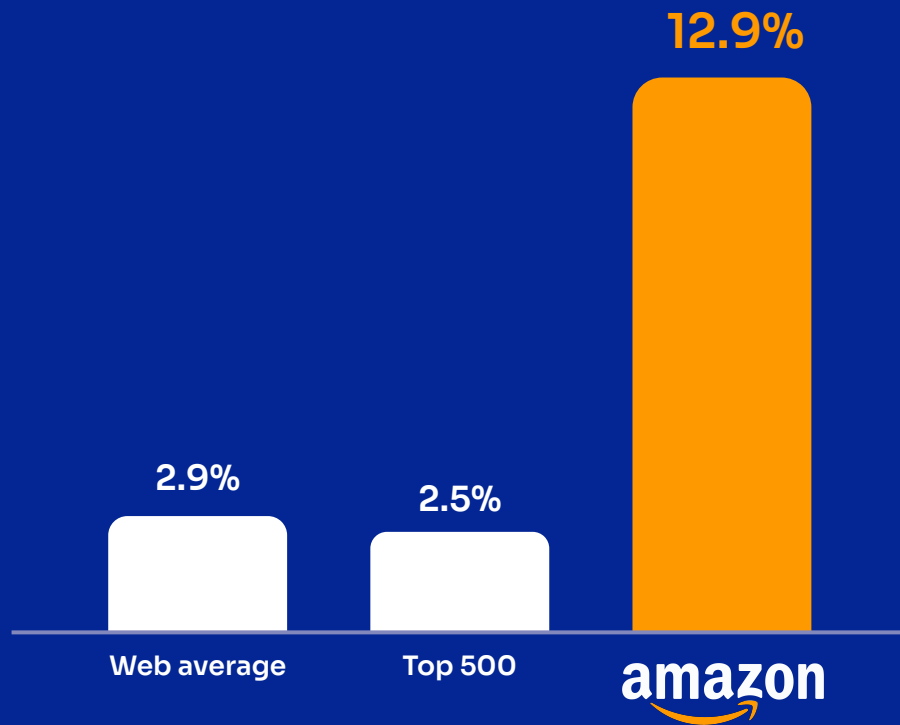
User
Loyalty

Better search drives higher conversion rates

“

Amazon makes over \$800 million a month in extra sales by continuously improving their search results.

Source : “Amazon \$10B growth hack that nobody knows about”, May 2019, Nacho Analytics



Search has been driving ecommerce revenue for decades



Search conversion rates
are 3X Browse on
average

300
%



Amazon's monthly revenue lift from
optimizing search results

\$800M



Of shoppers go straight
to the search bar

25%

But it's far from perfect

Complex keyword searches must be
overridden/ augmented

↗ **Search Abandonment**
↗ **No results**

Irrelevant, inaccurate,
unpersonalized results

↘ **Conversion rates**
↘ **AOV performance**

Time consuming to manage rules,
synonyms, and relevance

**Hours of management
by team members**

Machine learning is limited to pre or
post result retrieval

No true end-to-end AI

2022 changed everything...

With a quantum leap in
AI and natural language
understanding

The AI Revolution is here.

Behavior is changing

AQL: 2.6 → 6.8 words → Longer queries convert better, but they're harder to match

“The Netflix Experience” → Users expect dynamic browsing

The Long Tail of Queries → 70% of queries go unoptimized

The Market is adapting

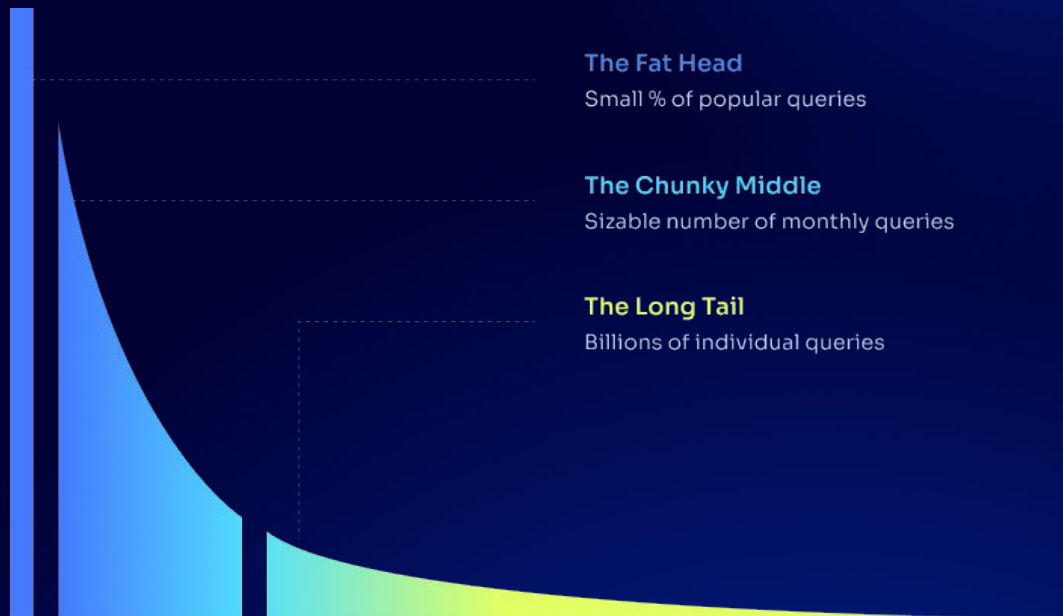


Query patterns

The “**fat head**” of search — the most common queries,

The “**chunky middle**” in which millions of on-site search queries can drive meaningful volume on the site

The “**long tail**” where billions of search queries generate a re



You need to move from

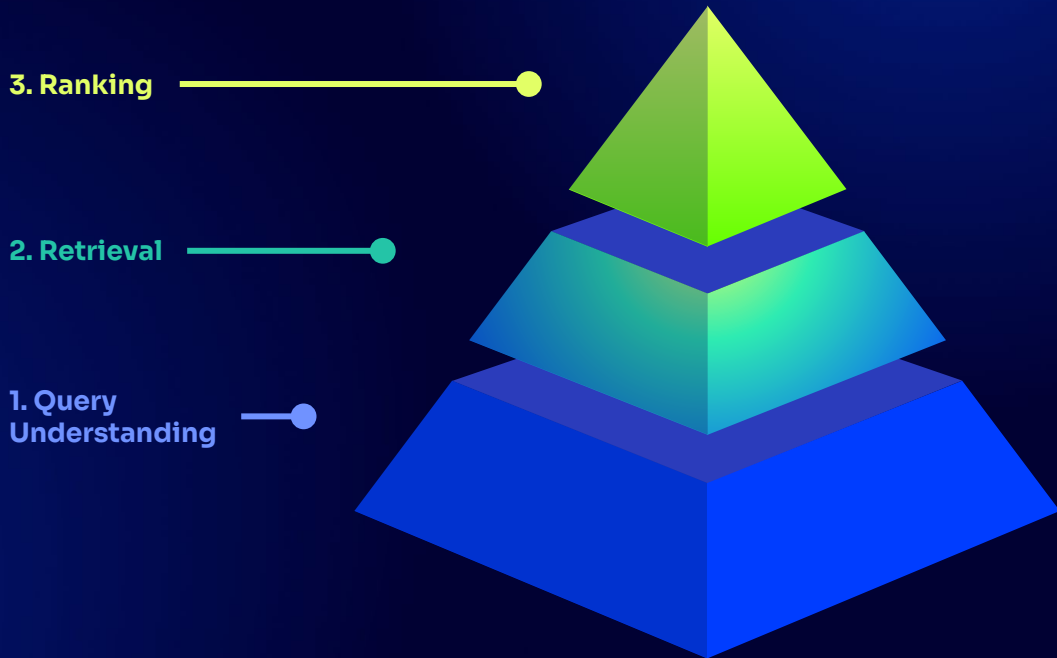
Matching

to

Understanding

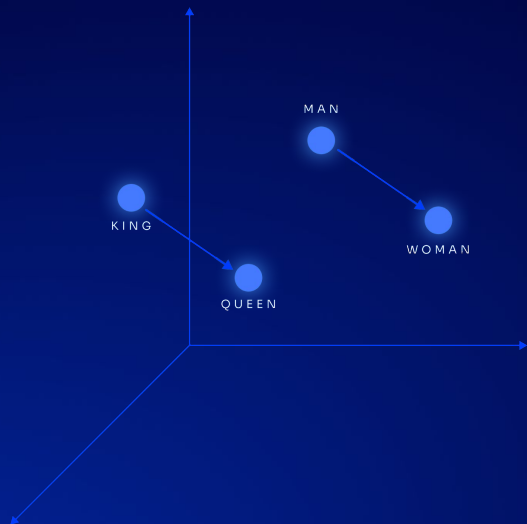
How can AI help? **Algolia NeuralSearch.**

Search is more than retrieval, of course. In our end-to-end AI search pyramid, retrieval (neural hashing) is in the middle. On each end of the AI pyramid is query understanding and ranking.



AI information retrieval

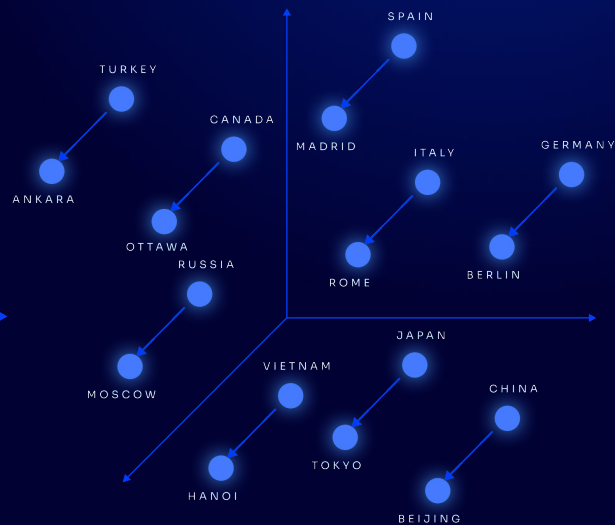
Vectors and embeddings



Male-Female

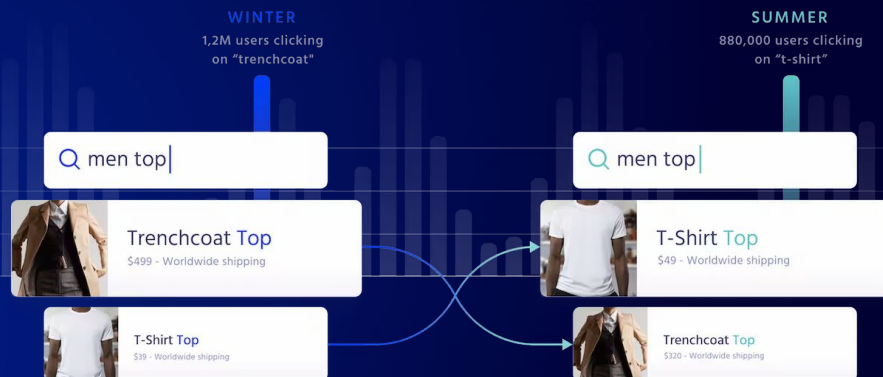


Verb Tense



Country Capital

Ranking



Keywords

Fast, scalable search based on textual matching precision.



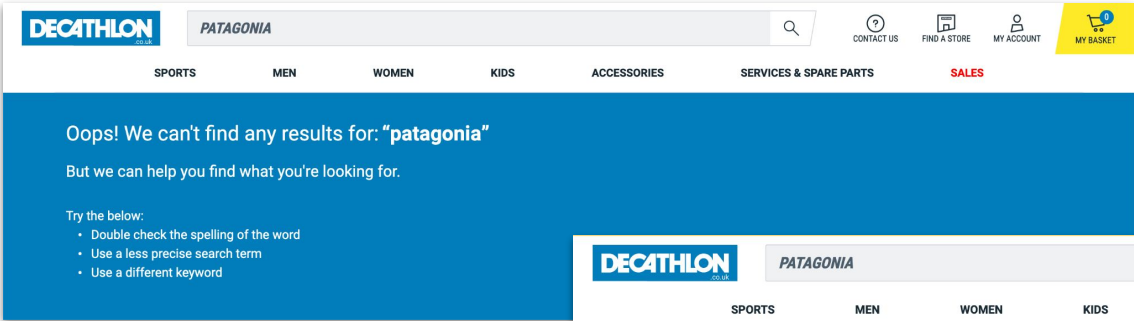
Vectors

First generation ML/AI. Better quality results, understands queries but very expensive and/or very slow at scale.

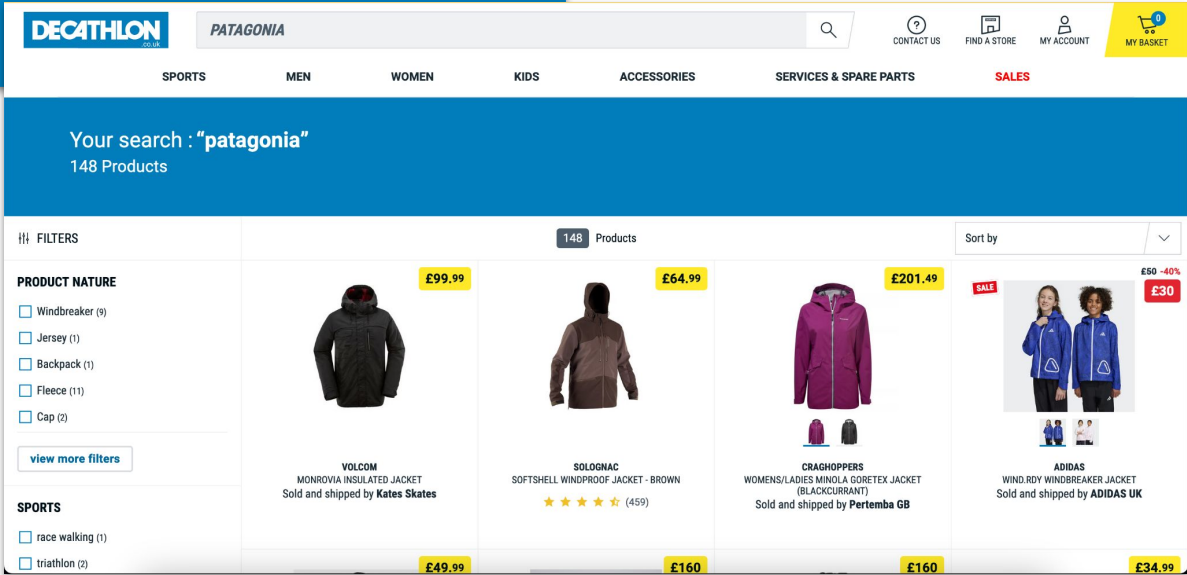
03

Exemple d'IA : Decathlon

Keyword Search vs Neural Search

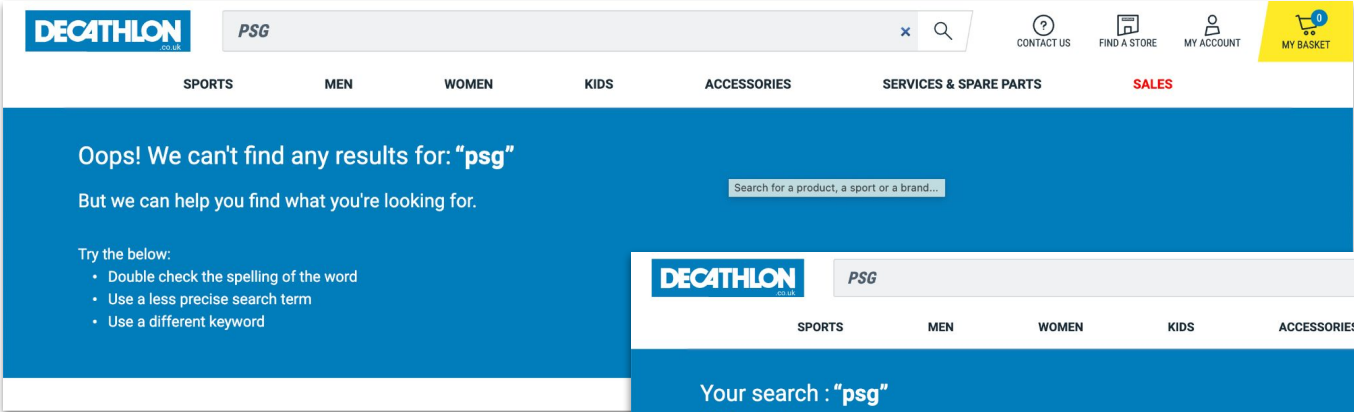


Keyword Search

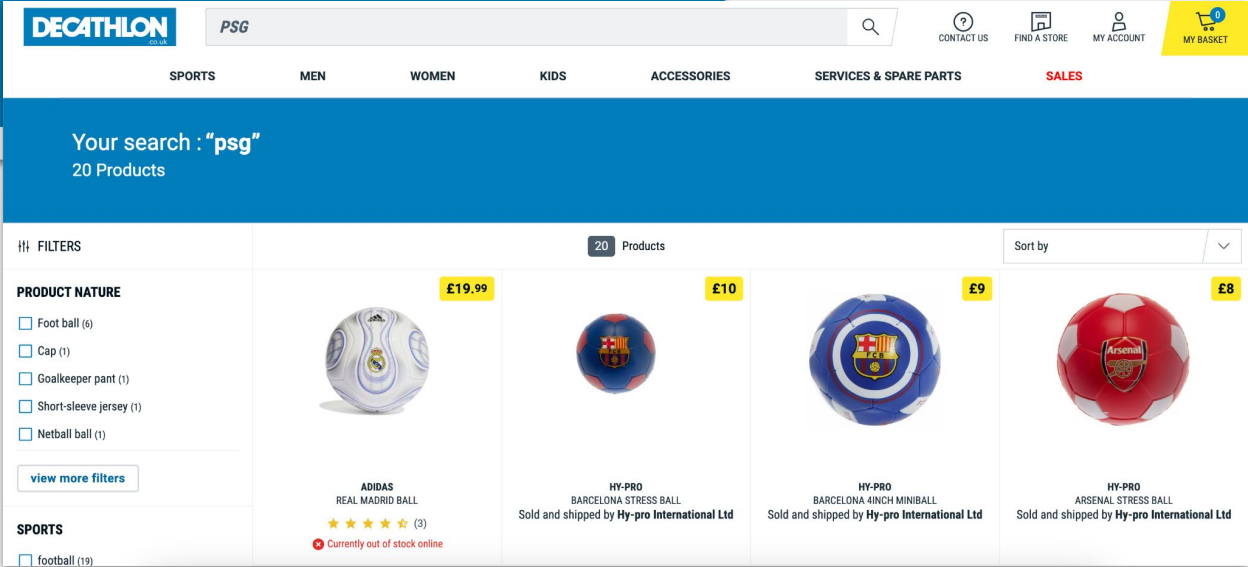


Neural Search

Keyword Search vs Neural Search



Keyword Search



Neural Search

Keyword Search vs Neural Search

ICE AXE FOR SKI MOUNTAINEERING



MOUNTAINEERING CRAMPONS AND ICE AXES

MOUNTAINEERING

ICE & FIGURE SKATING

SKI TOURING

ICE HOCKEY



MOUNTAINEERING ICE AXE - FOX CARVING

Crampsons and Ice Axes

Mountaineering

Ice & Figure Skating

Ski Touring

Ice Hockey

Keyword Search vs Neural Search

ICE AXE FOR SKI MOUNTAINEERING

MOUNTAINEERING CRAMPONS AND ICE AXES

MOUNTAINEERING

ICE & FIGURE SKATING

SKI TOURING

ICE HOCKEY



MOUNTAINEERING ICE AXE - FOX CARVING



MOUNTAINEERING ICE AXE - NAJA LIGHT MARTEAU



MOUNTAINEERING ICE AXE - NAJA LIGHT PANNE



ICE AXE FOR ICE CLIMBING - MAMBA



PETZL GLACIER ICE AXE [75CM]



KIT CALE FOR ICE AXE ANACONDA/COYOTE

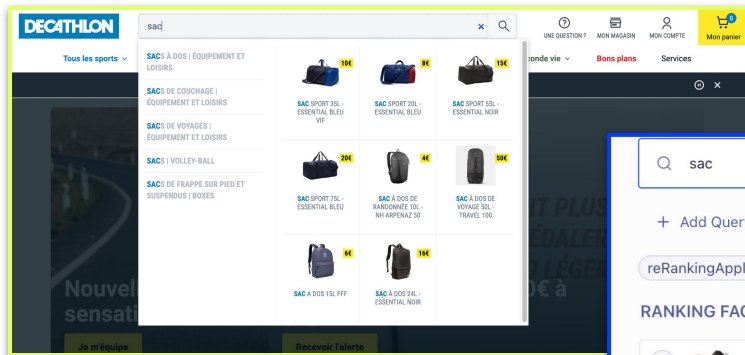


MOUNTAINEERING RIGHT-HAND ICE AXE - RAVEN GRIP



ADJUSTABLE WRIST STRAP FOR CLASSIC MOUNTAINEERING ICE AXE

Query understanding for AI re-ranking



DECATHLON

Search results for "sac" (bag) using Algolia's AI re-ranking capabilities.

Search bar:

Buttons: + Add Query Parameter, Display Preferences

reRankingApplyFilter: (isSkuAvailable:true)

RANKING FACTORS: # Rules

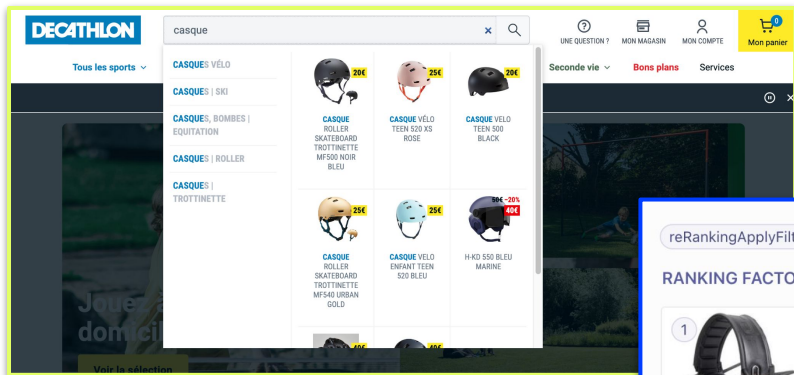
RANKING FACTORS: Dynamic Re-Ranking 7 ...

Results grid (6 items):

- 1. Sac à dos 24L - ESSENTIAL ... (KIPSTA, Sac à dos)
- 2. SAC A DOS TREKKING ... (FORCLAZ, Sac à dos)
- 3. Sac à dos de randonnée 10... (QUECHUA, Sac à dos)
- 4. Sac à dos de ... (KIPSTA, Sac de sport)
- 5. SAC A DOS ... (FORCLAZ, Sac à dos)
- 6. Sac à dos de ... (QUECHUA, Sac à dos)

Visual representation of re-ranking factors (e.g., 100, 98, 73, 68, 70, 68) and dynamic re-ranking scores (e.g., 106, 107, 117, 113, 117) are shown above the product images.

Query understanding for AI re-ranking



DECATHLON

reRankingApplyFilter: (isSkuAvailable:true)

RANKING FACTORS: # Rules

RANKING FACTORS: Dynamic Re-Ranking 10 ...

Rank	Product	Score	Re-Ranking
1	Casque électronique ...	7	100
2	Casque roller skateboard ...	100	87
3	CASQUE VÉLO VTT ST 50 ...	34	74
4	CASQUE INTÉ	15	71
5	CASQUE DE	18	69
6	CASQUE	8	60

AI Success Metrics with Decathlon

AI Re-ranking pour Decathlon



+3.7%

Taux de conversion avec AI
re-ranking

NeuralSearch est live pour 50% du trafic de Decathlon



-90%

Diminution des recherches sans
résultats

Les points clés à retenir

1. Keyword search is still needed
2. AI is mandatory moving forward
3. The business impact if HUGE





Merci!

Visitez www.algolia.com pour plus d'informations

Scannez le code QR pour entrer en contact avec Xavier Durieux
sur LinkedIn

