search hub

we help search engines understand humans

Pavel Penchev



Guten Tag Damen und Herren

Damenetuikleid

Weinkühlschrank

Damenmotorradlederhandschuhe TM

Warmduscher

Turnbeutelvergesser



About me

1 10+ years at Fredhopper

2 Seen Search from different perspectives

3 Now part of SearchHub@CXP



Search is about helping people find what they need. It's not judged by some abstract definitions of accuracy. It's jugded by how much it helps people.



search | hub already optimised over 4,450,577,681 search experiences for its customers. driving...

up to 40% more

up to 390%

up to 27% more

Value per Seero

99.95% of all requests

served in under 2 mg

couple of references



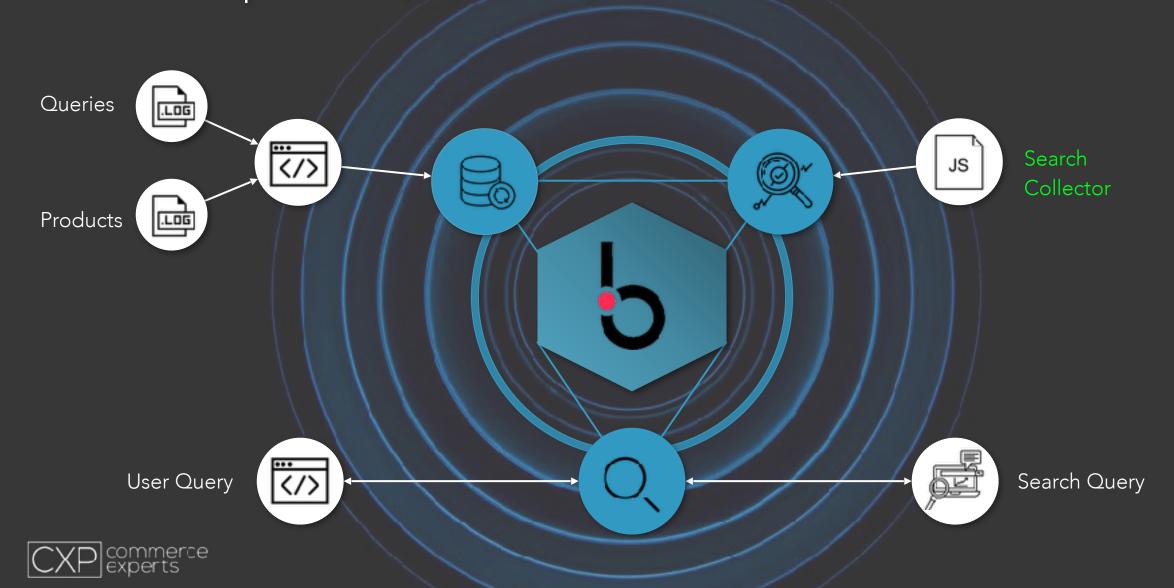




KAISER+KRAFT



SEARCH | HUB helps search engines understand humans



Why no Search Analytics off-the-shelf?



- Different expressivity
- Always requires post-processing
- Lacks search-specific capabilities



REQUIRES CUSTOMER INVESTMENT

- Site changes & Communication
- Access and setup
- Alignment



NO REAL OFF-THE-SHELF OPTIONS

- GA / Econda / PIWIK are great but lack important features
- How to get multivariate query analytics?
- How to cluster, normalise and aggregate query dependent KPIs





Basic Architecture - Assemble Your Own Solution

COLLECTORS

Collect search specific events from search & navigation pages based on query selectors, events and human interaction with the page

CONTEXT RESOLVERS

A search is not an isolated event, it happens within a context that carries a lot of useful data points

WRITERS

Components for assembling pipelines for writing data in the desired format and endpoint type



Sample integration code

```
var c = new SearchCollector.Collector({
    "resolver" : new SearchCollector.SessionCookieResolver(),
    "endpoint" : "https://sqs.aws......amazonws.com"
}
c.add(new ProductClickCollector(".product-item", e => e.get("id"));
c.add(new ImpressionCollector(".product-item", e => e.get("id"));
c.start();
```



Collectors

SearchResultCollector

InstantSearchCollector

ProductClickCollector

FilterClickCollector

ImpressionCollector

SearchEventCollector

BrowserCollector



Resolvers

QueryResolver

SessionCookieResolver

PositionResolver

Writers

RestEventWriter

SQSEventWriter

JSONEnvelopeWriter

BufferedWriter

Base64EncodingWriter



Behind the scenes

DELAYED WRITING

Buffer the events and group them before sending, necessary for things like impressions, data is kept across page reloads

IMPRESSION DETECTION

An impression consist of a product rendering entering the viewport

DOM INSERTION DETECTION

Handle not only the elements that are currently rendered on the page but also dynamically inserted elements

QUERY RESOLVING

The context of the search is of great importance, we resolve the search and the filtering and attach it to each event

SQS SUPPORT

Writing supported for REST interfaces, SQS and compatible queues

HEADLESS TESTS

Unit testing of event collection via Puppeteer headless browser testing framework





RESOURCES

https://github.com/searchhub/search-collector

The Search Collector source code, published under MIT license

https://searchhub.io

Learn more about SearchHub

