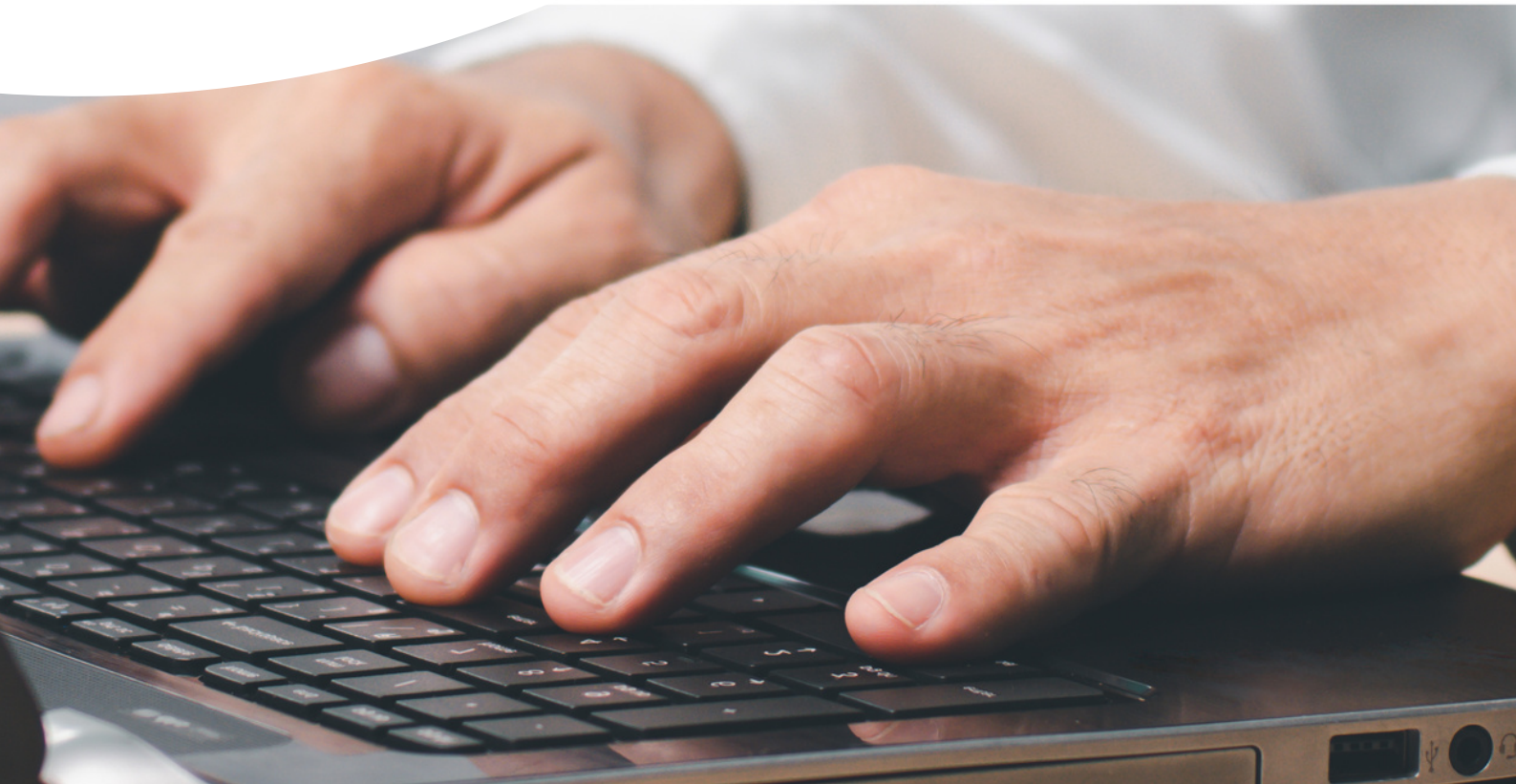




# THE POSSIBILITIES OF AI SEARCH

Squadra Machine Learning Company





## Introduction

Traditional search methods based on keyword matching fall short of delivering accurate and relevant results. The advent of AI has led to enormous developments in search technologies. In this blog, we discuss how AI-driven language models and visual search are transforming search experiences in different domains, based on three projects.

search

shift





## Visual search

Machine Learning Company has worked on several visual search projects. Vector technology uses deep learning to capture visual features in images to compare with the query. This allows the tool to understand what is on the photos within a certain context. This not only makes it possible to search accurately within a huge database, but also makes it easier to search for a specific style or subject.

These search methods offer both internal and external possibilities. For example, the search engine can be used by employees to quickly and easily search for relevant products within a database. In the image below, relevant products are found from a database based on the query 'rainbow easter'. The search engine understands that a "rainbow" consists of different colors and that "easter" has to do with eggs and spring.

The screenshot displays a search interface with the following elements:

- Search bar:** Contains the text "rainbow easter".
- Sorting:** A dropdown menu set to "Score".
- Filters:** Four filter buttons: "Filter on file location", "Filter on location", "Start Date" (with a date format "dd-mm-yyyy" and a calendar icon), and "End Date" (with a date format "dd-mm-yyyy" and a calendar icon).
- Search button:** A large green button labeled "Search".

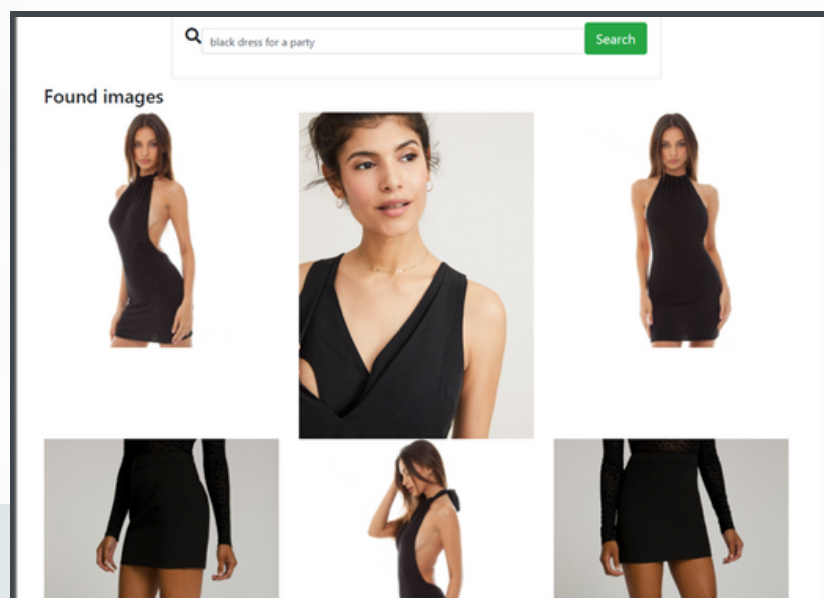
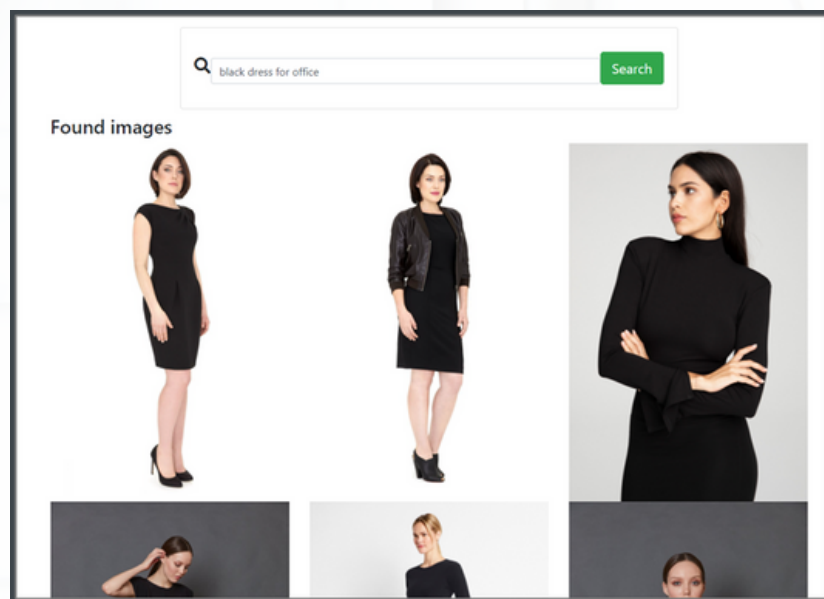
Below the search bar, the results are displayed as follows:

- Found images for: rainbow easter**
- Showing 1 - 50 results (out of 1000)**
- Navigation:** A pagination bar with numbers 1 through 20, where "1" is highlighted in blue.
- Image 1:** A pyramid of colorful Easter eggs. Date: 2016-02-01. Caption: beeldbank/2016/Christmas World YB VH EvM ATL
- Image 2:** A display of colorful Easter eggs in a shop. Date: 2021-11-11. Caption: beeldbank/2021/Shopronde Manchester 11-12 november - Midden - Chapeau - Colours/Chapeau
- Image 3:** A box of "6 SILICONE SPRINGTIME EGG-HOULDS". Date: 2020-03-09. Caption: beeldbank/2020/Shopronde NM - JB UK - Mrt/NM



Visual search can also be applied to webshops. This makes it easier for customers to get to the intended product. Suppose a customer is looking for a black dress that is suitable for the office. With a traditional search engine, the customer has to decide for himself which dress is suitable, but with visual

search, the search engine understands the context of 'work' and will show the most suitable articles. In the images below you can clearly see the difference between the black dress for work and the black dress for a party.







## Smart language models

Smart language models use advanced NLP models to improve the search experience. These models understand the context of language and can provide accurate and relevant search results. While traditional search engines are based on matching keywords and results based on simple ranking algorithms, smart language models use context to generate better search results.

This technology offers particular opportunities in the world of recruitment. The search engine itself matches the candidates and the vacancies, so that the recruiter can immediately start the application process with the most suitable candidates. The images below show an example of a vacancy and a candidate with relevant work experience.

### Wat ga je doen?

De Doen Coach begeleidt de cliënt met zijn specialistische kennis tot Doen, maatschappelijk participeren en daar waar mogelijk in zijn herstel, tot arbeidsparticipatie. De nieuwe ontwikkelingen binnen de WMO vragen om een netwerker puur sang intern én met de externe partijen. Je biedt begeleiding op zowel individueel- als groepsniveau. De Doen Coach stelt op maat de activiteiten voor de cliënt samen, passend bij zijn herstel en zijn ontwikkeling op de participatieladder. Dit doen we vanuit de gedachte we werken aan perspectief. De Doen Coach is het creatieve brein met betrekking tot alle voorkomende participatie vraagstukken van cliënten. Door deze deskundigheid en resultaatgerichtheid staat Expertise Doen bekend als het expertisecentrum dat maatschappelijk herstel van cliënten aanzienlijk verhoogt en daarmee een belangrijke schakel is in het proces naar zelfstandigheid. Als Doen Coach ben je met je collega's samen verantwoordelijk voor het uitvoeren van diverse Doen projecten.

### Werkervaring

#### Helpende

Bieden van adl zorg en ondersteuning van mobiliteit, helpen met eten en drinken.

#### Verzorgende IG ( in opleiding )

Het verzorgen, verplegen en begeleiden van mensen die het nodig hebben. Het onderhouden van contact met de huisarts en andere disciplines zoals fysiotherapeut, arts of verpleegkundige.

#### Pedagogische medewerker

Verantwoordelijk voor de dagelijkse opvang, ontwikkeling en verzorging van een groep kinderen.

#### Persoonlijke begeleider

Jong volwassenen begeleiden op individueel- en/of groepsniveau. Observeren van de cliënten en signaleren van veranderend gedrag en het Registreren en rapporteren van jouw bevindingen.

#### Wooncoach

Het coachen van volwassenen met een (licht) verstandelijke beperking. En het coachen van cliënten bij het wonen naar hun zelfstandigheid.



## **AI search and Squadra MLC**

Discover the possibilities of AI search for your company with Squadra: Machine Learning Company. We are an innovative Dutch company that combines knowledge about business processes, algorithm development and data visualization with the aim of helping customers with machine learning algorithms and the application of artificial intelligence. As an expert in the field of AI search, we implement the right tailor-made solution.

Are you curious what Squadra: Machine Learning Company can do for you? Contact us via the QR code.

