Zeta Alpha

AI TO DISCOVER AND ORGANIZE KNOWLEDGE FOR HIGH TECH COMPANIES

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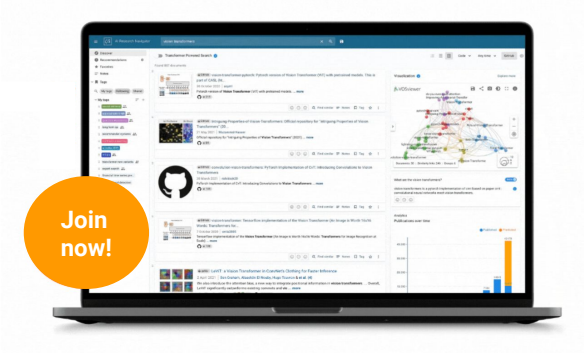
Zeta Alpha

Connecting People and Knowledge, since 2019.
HQ in Amsterdam, office in SF since 2023.

Allows **High Tech Companies** to turn proprietary expertise into **Next Gen AI capabilities**.

A smarter way to discover and organize knowledge

Zeta Alpha is the best neural discovery platform for public and private documents. We streamline how you and your team discover, organize and share knowledge — in AI and beyond.



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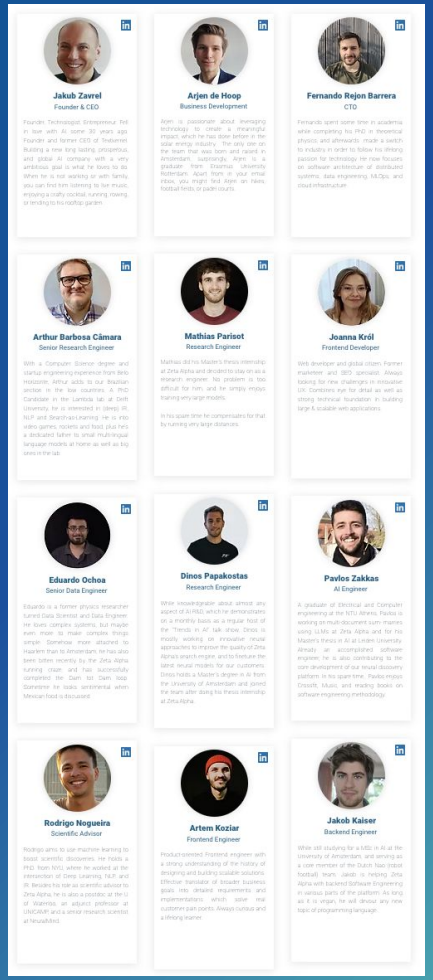

PROBLEM: KNOWLEDGE REUSE IN THE ENTERPRISE IS RIDICULOUSLY INEFFICIENT AND EXPENSIVE.

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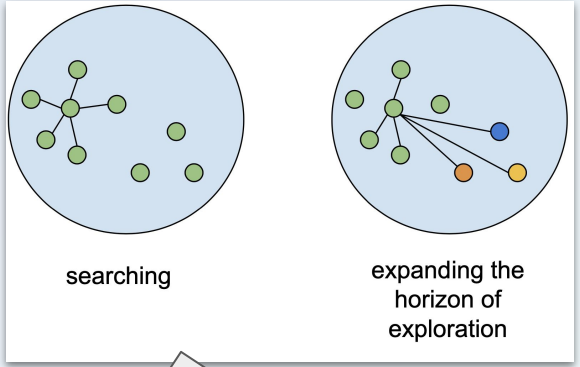
1. DATA FRAGMENTATION: INTERNAL AND EXTERNAL

slack
SharePoint
GitHub
SAP
salesforce
Trello
Google Drive
McKinsey & Company
HubSpot
Springer

2. CLASSIC KEYWORD SEARCH



SOLUTION:

ONE KNOWLEDGE CENTER: NEURAL SEMANTIC SEARCH IN ZETA ALPHA PLATFORM

ASK QUESTIONS, GET ANSWERS FROM EXISTING INTERNAL DOCUMENTS AND CONNECT TO THE RIGHT EXPERTS

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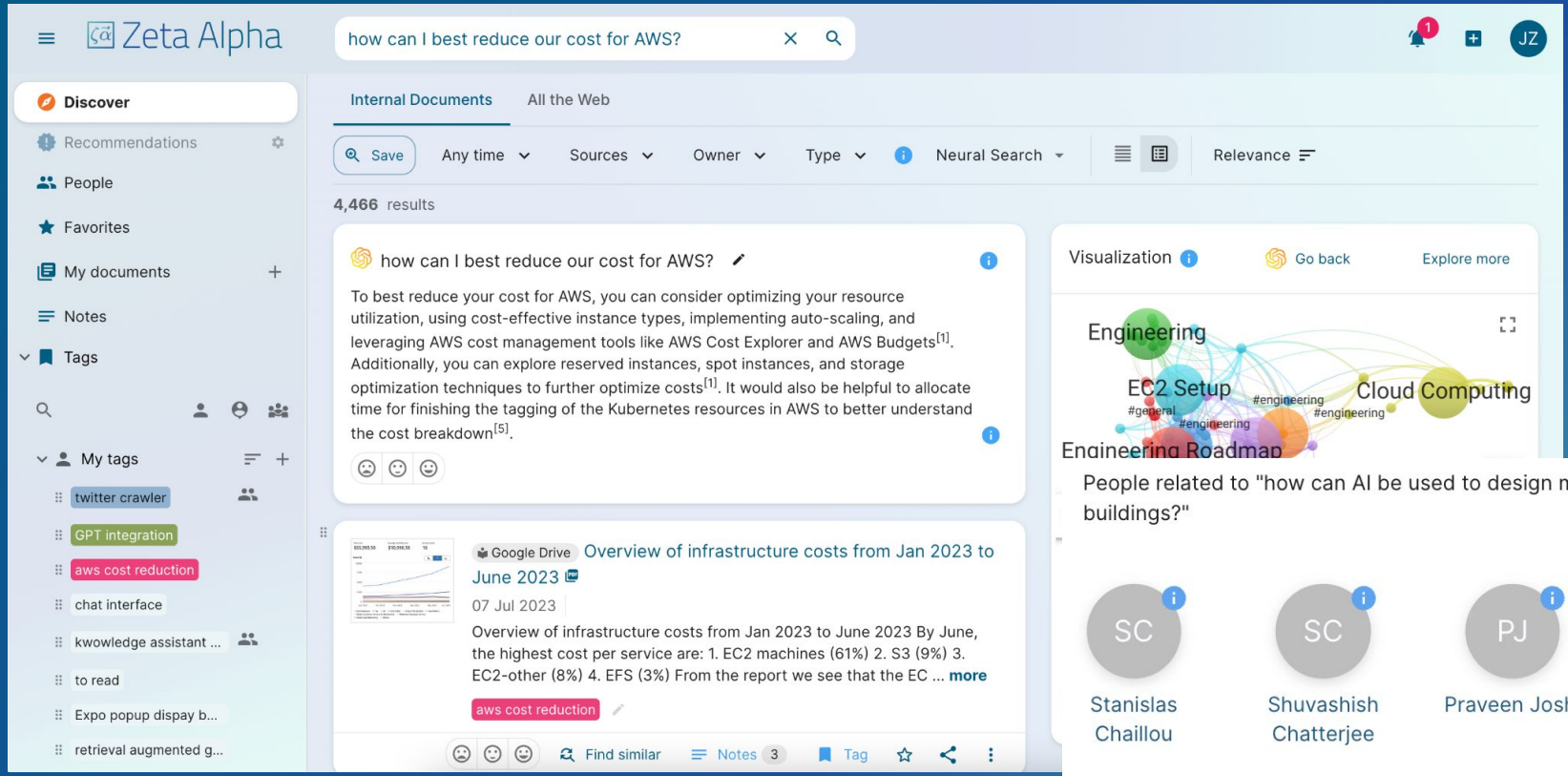

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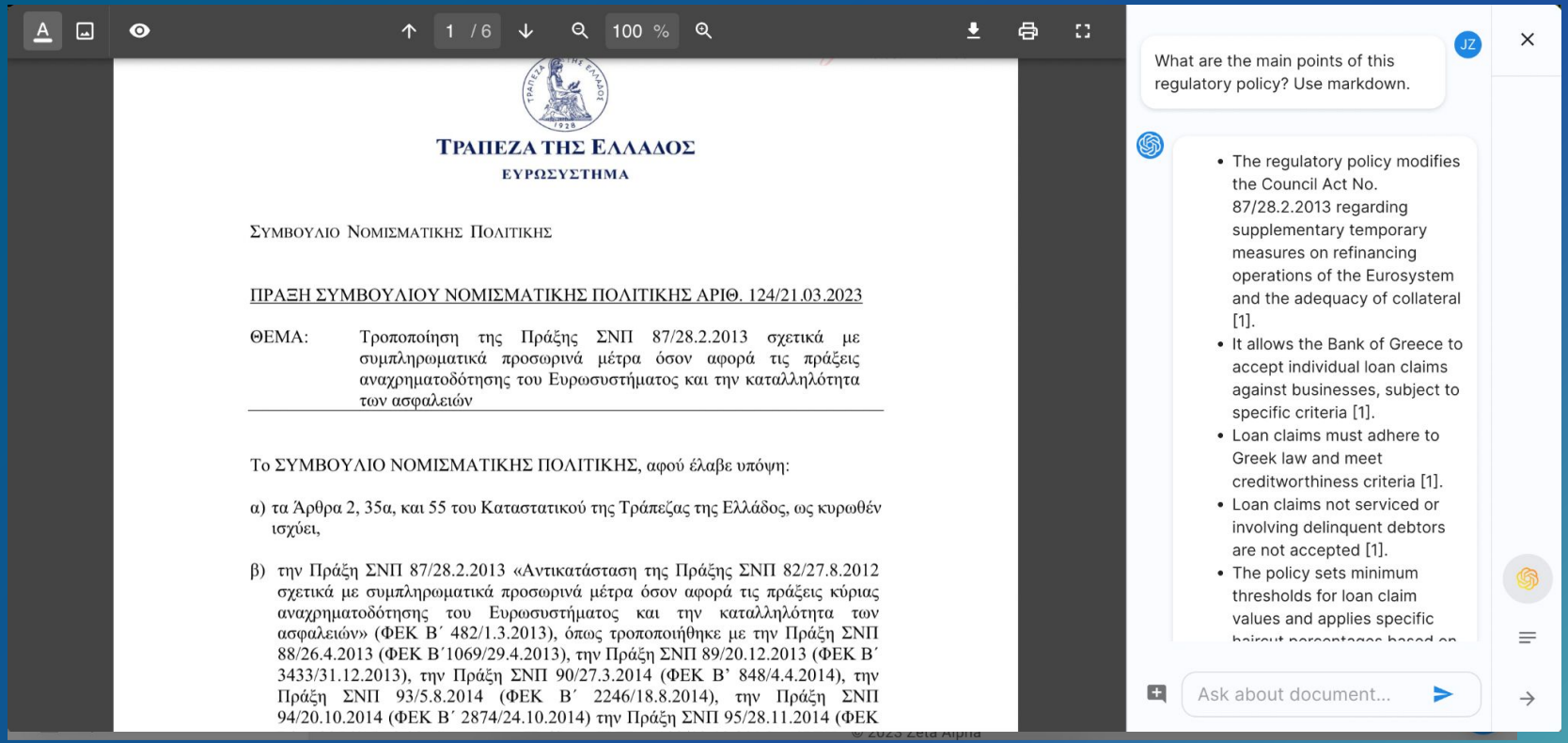
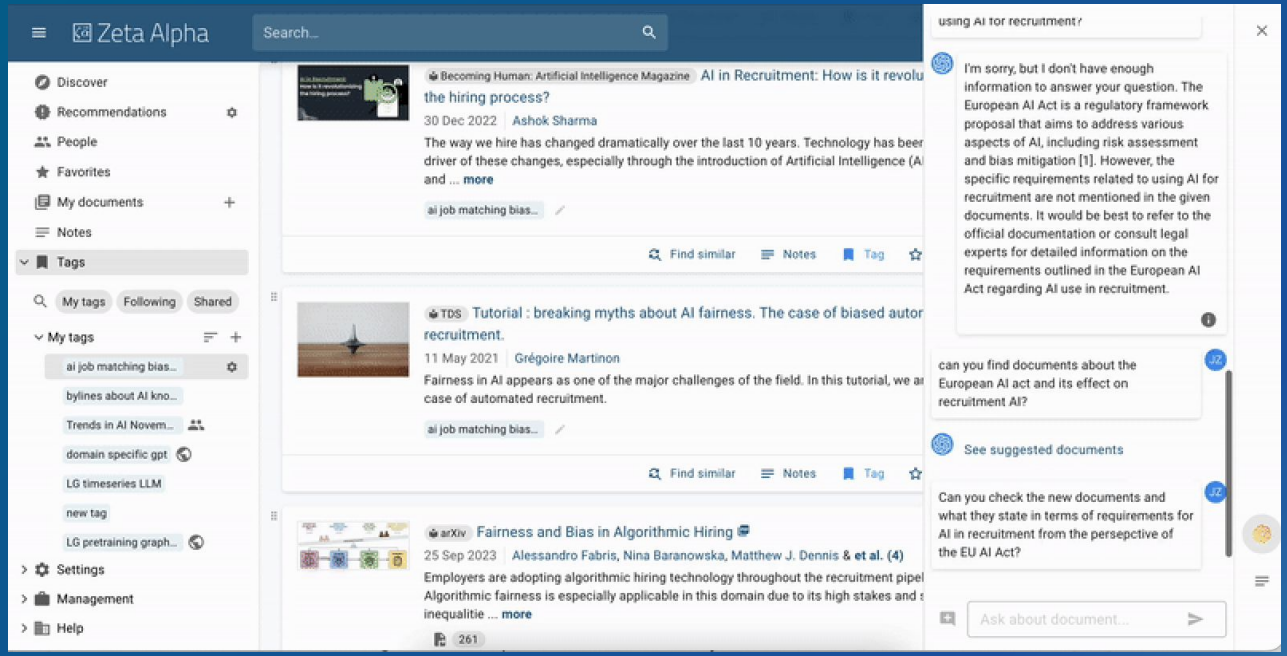
CHAT WITH YOUR OWN DOCUMENTS



TOWARDS KNOWLEDGE ASSISTANTS – AGENT AND TOOLS



- Guided exploration during onboarding to new topics or projects.
- Lookups in other internal IT systems.
- Conversation refines queries like brainstorming with an expert.

THE FUTURE IS MULTIMODAL...

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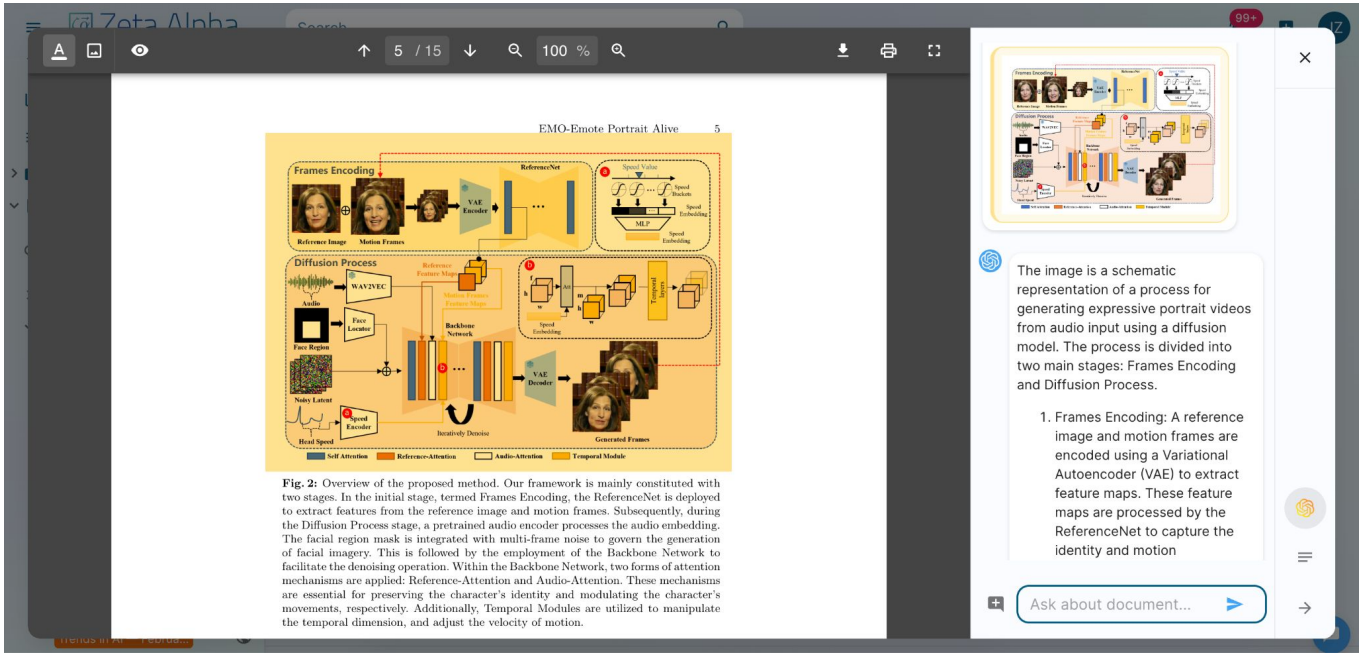

- **Ask questions** about figures, schemas, and tables.
- **Use as OCR** to extract information from pictures.
- **Augment documents** with new meta data.
- **The start of the multi-modal search journey.**

ZETA ALPHA PLATFORM ARCHITECTURE

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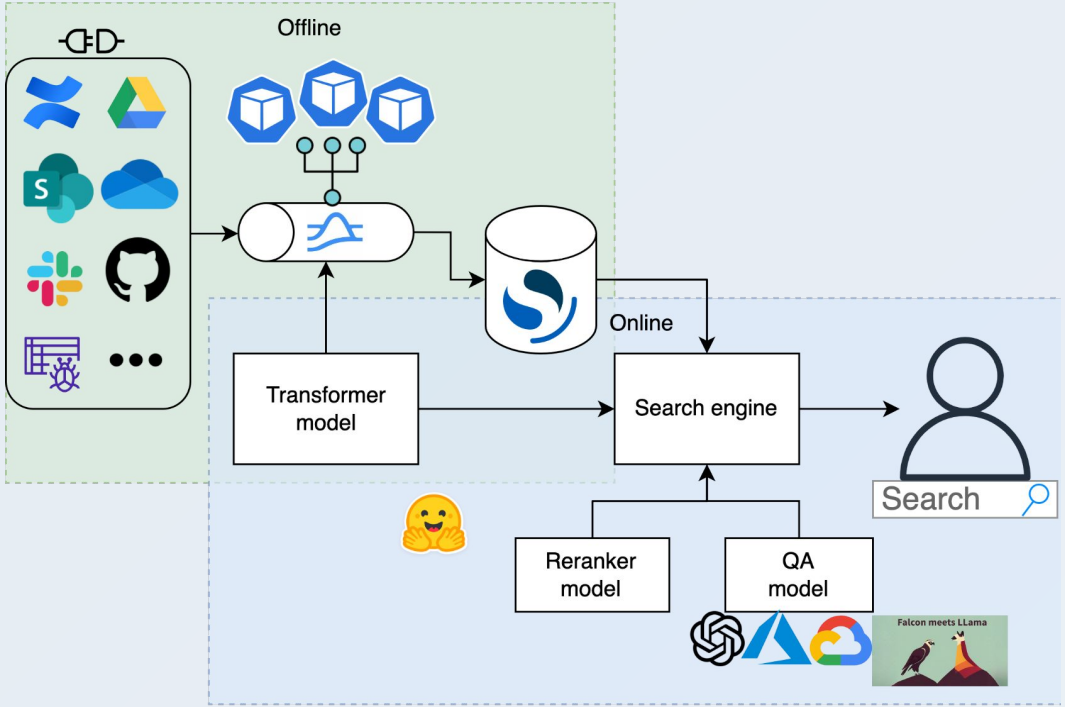

- **Document ingestion pipeline** feeds the Index from data connectors.
- **Access rights** enforced from ingestion to search
- **Search API** provides query processing and retrieval of relevant documents, passages, concept analytics, expert search
- **Hybrid search**: hard filters and keywords, as well as k-NN vector search.
- **Answers API** provides Search & GPT integration for question answering via RAG.

RETRIEVAL AUGMENTED GENERATION (RAG)

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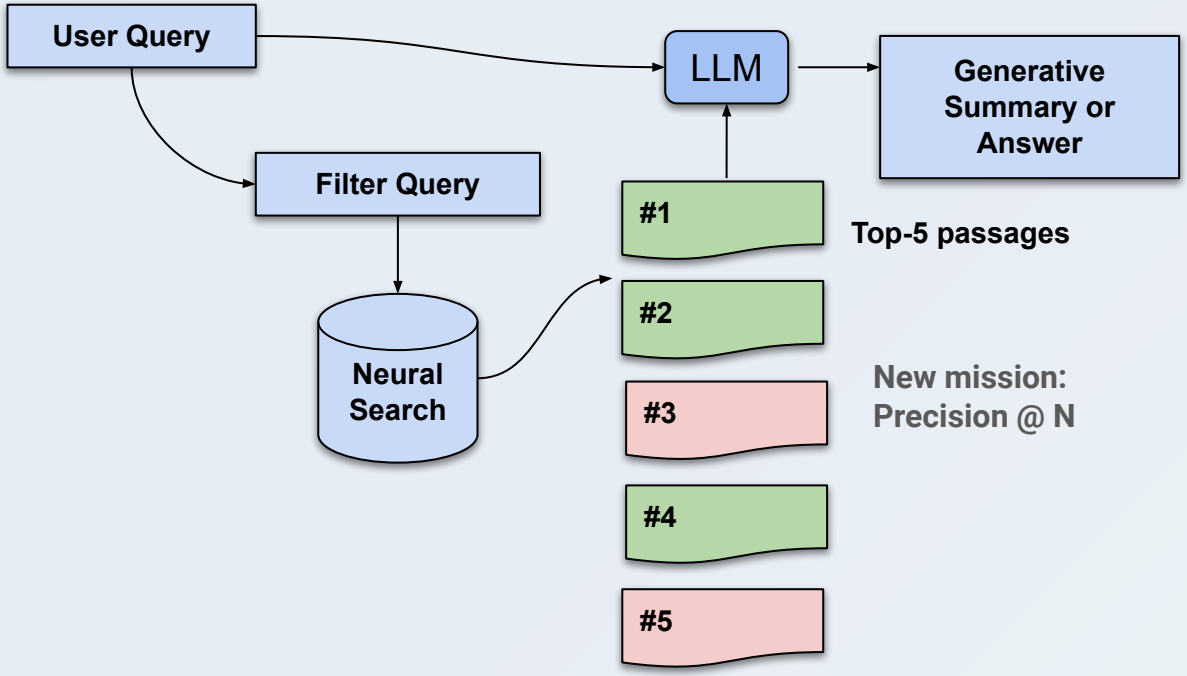


When I have question, like:

```
What is the best way to train a BERT model at a low cost?
```

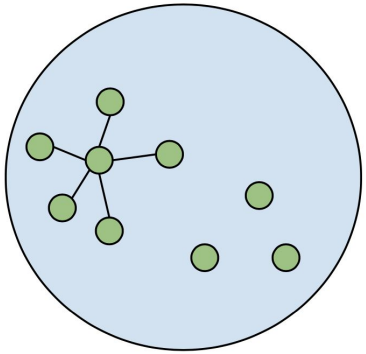
Not

```
What is the best way to train a low cost RL model?
```

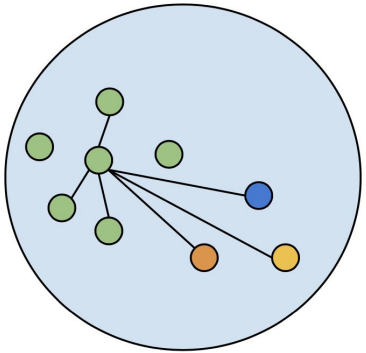
But

```
How to Train BERT with an Academic Budget
```

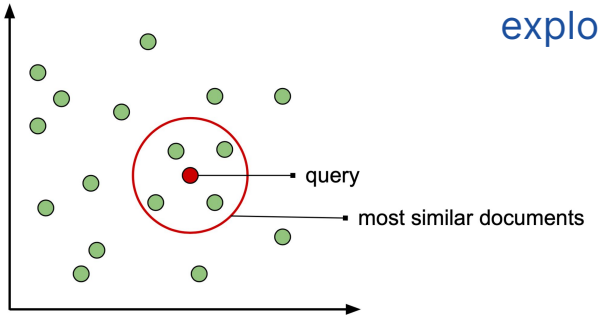
THE R IN RAG: WHY NEURAL SEARCH?



searching



expanding the horizon of exploration



- Neural Search is Semantic Search. Similarity vs, surface keywords matching: bridge the **lexical gap**
- Context and relationships crucial in interpreting meaning: handles complex and **relational questions**
- Unstructured data accessible without classification and taxonomies, even **multi-lingual** and **cross-lingual**
- **Multi-modal** capabilities: potential to combine text, audio, images and video

FINETUNING NEURAL SEARCH FOR QUALITY

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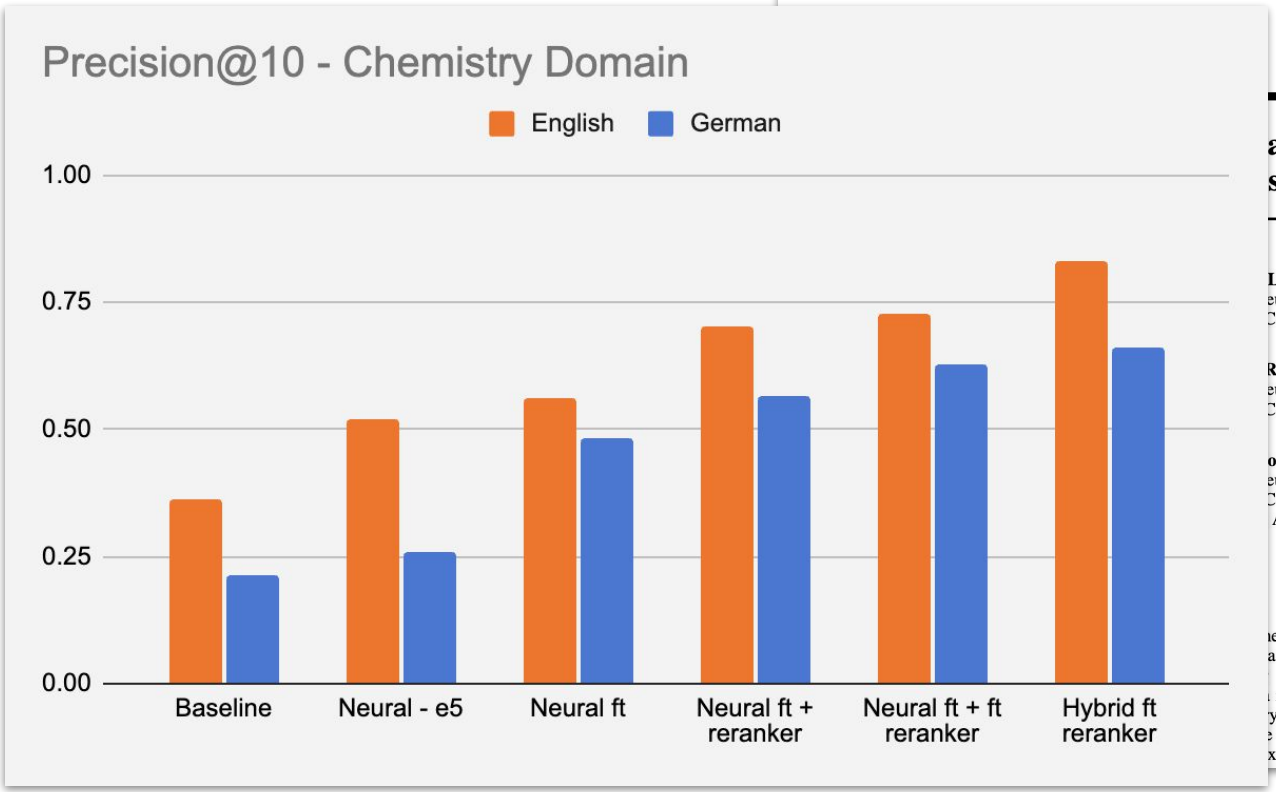

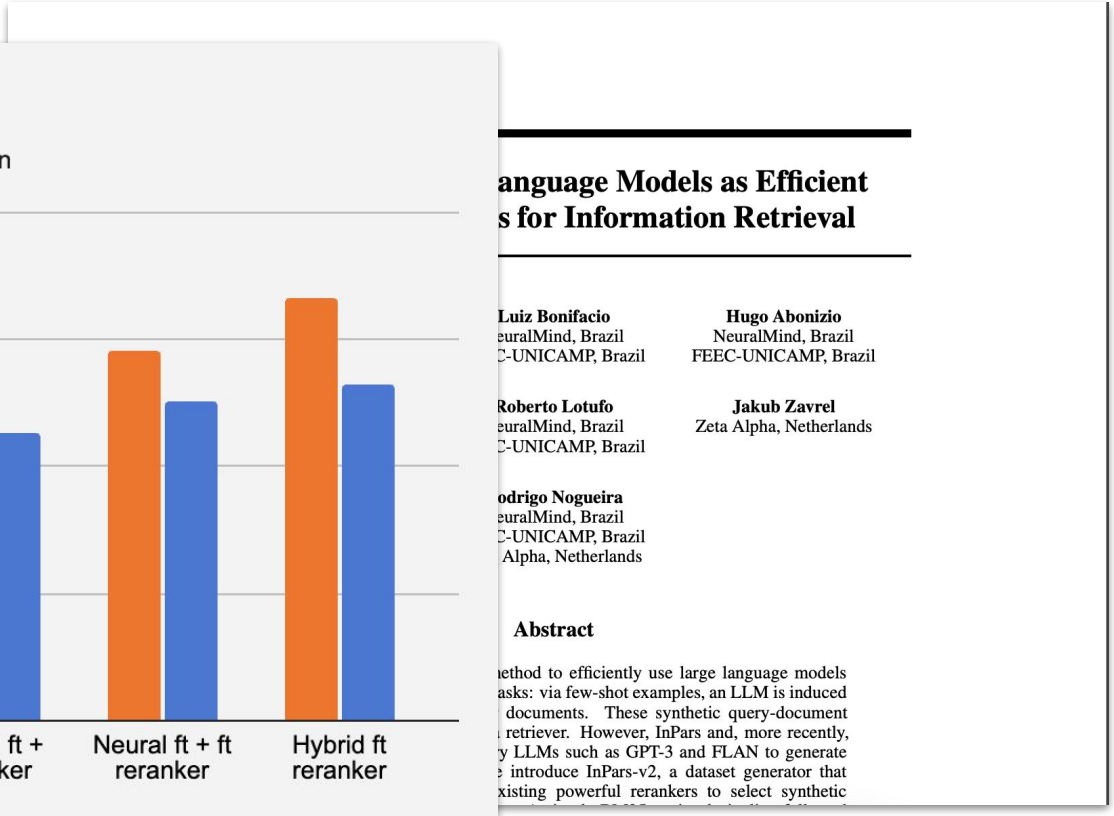

anguage Models as Efficient
s for Information Retrieval

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Abstract

ethod to efficiently use large language models
asks: via few-shot examples, an LLM is induced
documents. These synthetic query-document
retriever. However, InPars and, more recently,
y LLMs such as GPT-3 and FLAN to generate
introduce InPars-v2, a dataset generator that
xisting powerful rerankers to select synthetic

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WHY IS ZETA ALPHA UNIQUE?

- **Proven expertise, consulting in domain specific Neural Search.**
  - Finetuned Neural Embedding models have >200% better search relevance.

- **For Knowledge Discovery in R&D and Tech Teams** - Zeta Alpha has an unrivaled breadth of **discovery and organization** tools beyond just Search and Gen AI.
  - Tags, Notes, PDF Chat, Knowledge Assistant, Recommendations, Sharing, Visualization, Analytics, Expert Search and much, much more.

- **For RAG use cases** - Zeta Alpha offers a **secure**, **mature** and **customizable Enterprise IT platform** for building bespoke LLM powered chat solutions.
  - SSO, access control, on-prem, connectors, configurable Hybrid and Federated search.

Bridging the advantages of DIY solutions like Langchain (flexibility, customization, *but hard to move from prototype to production*) and one-size-fits-all solutions like MS Copilot (stable, Enterprise IT ready, *but not suitable for domain specific and customized solutions*).

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WHY? – ZETA ALPHA & YOU

- Make **your teams** more productive and reuse **internal and external knowhow and expertise** **in a central knowledge hub** across languages and teams**.**

- Unlock the knowledge inside **internal technical and project documentation** across **your company**, for**:**
  - Management & Strategic Analysis
  - Expertise Search & Project Staffing
  - Onboarding and Knowledge Transfer
  - Sales engineers & customer facing consultants

- Streamline **external access by customers and partners** to **your** knowledge and documentation using chatbots in product and learning portals.

  We are looking forward to work with you to discover how AI can impact ROI on knowledge for you.