

The Future of Personalized Search Engines

People have all been used to use Google Search Engine whenever they need to search for something online. This technology review will present another rising online searching service/experience which might change the way people and companies interact with data in the future. That new technology is the AWS Kendra.

Amazon Kendra is an intelligent search service provided by machine learning. Kendra reimagined the corporate search of websites and applications so that content can be easily found across the organization. Amazon Kendra constructs indexes and ML models upon unstructured data including texts, images, videos, etc., so that users of the service can search and find the correct answers.

Currently, Kendra is designed as an easy-to-use enterprise-level search service that can help you add search functions to your application, ensuring that end users can easily find information from different data sources stored within the enterprise- specifically including receipts, business documents, and technology Manuals, sales reports, internal company glossaries, internal websites, etc. You can obtain this information from storage solutions.

When entering a question, the service will use machine learning (ML) algorithms to understand the context and return the most relevant results-including accurate answers or complete documents. More importantly, you don't need to have any machine learning experience to complete the operation. Amazon Kendra also provides you with code that can be easily integrated with new or existing applications.

As what we have learned from class, one possible future of text retrieval system is to make the system more specialized in data from certain area. Another possible improvement is to combine pull and push system, more specifically, creating systems which can both search and recommend through data. Kendra is such a service that can accomplish the above two goals at the same time. Rather than making a similar product as the google search engine and compete directly against the giant in the field, AWS Kendra focuses on specialized searching experience. It emphasized on its high

efficiency to create, store, and retrieve indexes so that users can create their own search engine with enormous amount of data in relatively short amount of time. It also integrates many State-of-the-art natural language processing models to improve the text understanding ability of their search service. With the help of these models, Amazon Kendra searching service has the ability to perform question answering, property linking, recommendation along with the essential searching functionality.

With this new revolutionary searching service, many companies who works with massive amount of data in their business can create their own secure, fast, and accurate search engine which can not only provide the most relevant data with any given query, but also help you to make decisions, answering you questions, and provide recommendations. Amazon Kendra provides a better way for people to be connected with the information they needed.

Besides these astonishing accomplishments, Kendra is also highlighted with its active learning ability. Kendra can actively strengthen training, build deep learning models for corporate data sets and employee usage patterns, and explore in the form of search. As it is finally used to interact more with search results, Kendra can fine-tune its results. If you give or give a thumbs up to some results, Kendra will make the more specific results highly relevant and just beginning to surface. In addition, Kendra provides the option of manually adjusting relevance. For example, users can improve some of the content in the index (such as document freshness, number of views, or specific data sources) or recently frequently accessed documents (such as trending news and updates). The natural use of language to search is just to get what you need through keywords. Everyone in Kendra's early document got up together, and the answer was returned. The text is a screenshot of the text, a quick question and answer, and a document, which are all suggested answers that can be collected, rather than a lengthy document list to find a specific answer.

Reference

<https://docs.aws.amazon.com/kendra/latest/dg/what-is-kendra.html>

<https://docs.aws.amazon.com/kendra/latest/dg/how-it-works.html>