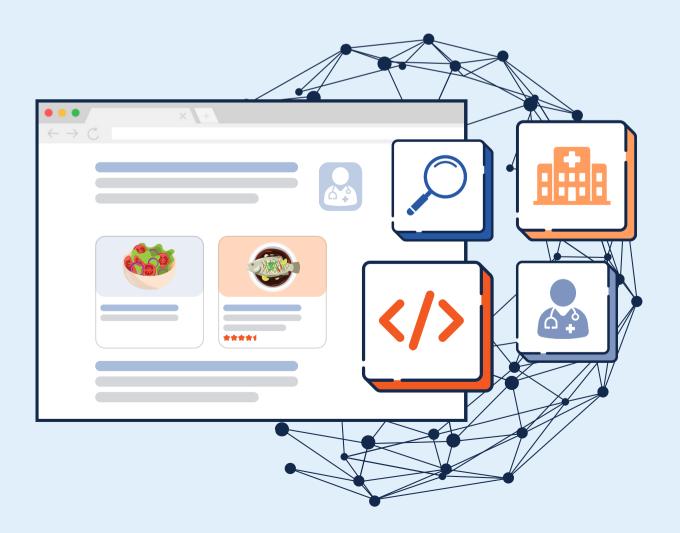


## Definitive Guide to Healthcare Structured Data in SEO

Crafting an Effective Schema Markup
Strategy for Healthcare Organizations



## Introduction

Structured data, also known as <u>Schema Markup</u>, is a powerful but underutilized SEO strategy that can help healthcare organizations stand out in search.

By adopting this strategy, you can bring important and relevant information to customers throughout their digital health journey, resulting in higher engagement, improved customer experience, and more appointments booked.

In this guide, we dive into:

- The role Schema Markup plays in keeping your healthcare organization competitive in search
- How to mark up common types of healthcare page content to develop a comprehensive Schema Markup strategy
- The types of rich results your pages can achieve
- How Schema Markup supports the development of your organization's content knowledge graph

Let's get started.

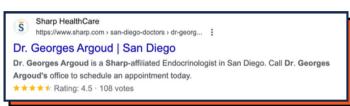


## What is Schema Markup?

At its core, Schema Markup is a specific type of structured data based on the <u>Schema.org vocabulary</u>. Schema Markup can be expressed using several machine-readable formats, but most commonly using JSON-LD.

SEO teams can use Schema Markup to describe the content on their web pages so search engines can easily understand and contextualize the information to provide users with more relevant results on the search engine results page (SERP). In some cases, Schema Markup can also enhance the appearance of a search result on the SERP as a rich result.

The image is an example of a review snippet – a type of rich result achieved by a physician page – powered by structured data.



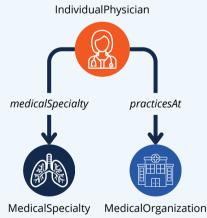
#### Schema Markup Helps you Identify & Describe the Entities on your Site

The content on your website is home to entities that are relevant to your organization.

An <u>entity</u> refers to a single, unique, defined, and distinguishable thing or idea. It possesses defining characteristics and attributes (like size, colour, or even name) and is understood in relation to other entities.

For example, your organization has a physician page about Dr. Amy Lee. Without any other information, 'Dr. Amy Lee' means nothing to us humans or machines. However, if we include information about where she practices and her medical specialty, 'Dr. Amy Lee' is now an entity we can identify through these attributes.

When you implement Schema Markup on a page, you are describing these entities and their relationships to other entities on your site in a language that machines can understand and contextualize.



- The **Schema.org Type** is used to *categorize* the entity.
- The **Schema.org properties** are used to *describe* the attributes of the entity or the relationships between the entity on the page and other entities on the site.



New to the Schema.org Vocabulary? Read our <u>Guide to the Schema.org</u> <u>vocabulary</u> or take our free <u>Schema Markup 101 course</u> to learn more about the Schema.org Types and Properties.

## Importance of Schema Markup for Healthcare Organizations

With an increasing number of people relying on the internet for medical information, ensuring the accuracy and relevance of the answers they receive in search results is now more critical than ever.

Employing Schema Markup supports this goal by assisting search engines in accurately understanding your content and presenting it to relevant audiences and queries, which leads to these benefits.



#### Greater control of how search engines understand your brand

When you implement Schema Markup, you provide search engines with information about your brand through your content and control how your customers perceive your brand in search.

Most search engines today are powered by large language models (LLMs) prone to errors and hallucinations. Schema Markup enables search engines to be grounded in factual information, which enables them to provide more accurate search results.



#### **Rich results**

Implementing certain types of structured data can make you eligible for a rich result. Rich results can include star ratings, reviews, and other details, making your organization's search appearance more engaging and informative. Pages with rich results also tend to see an **increase in click-through rate** and **higher-quality traffic**.

Rich results like review snippets are significant for fostering trust and credibility with your customers at the start of their health journey. This information is vital for making informed decisions about their health and determining the appropriate services to turn to.



#### Improved user experience

By helping search engines understand your content and provide more accurate results, users can easily obtain critical information like services and hours of operation directly on the SERP. This streamlined experience can also facilitate easy navigation to booking pages, reducing steps for user-friendly appointment scheduling.





#### **Better Local SEO for Clinics and Hospitals**

For healthcare organizations with physical locations, providing specific details about each location (ie. location, hours of operation, etc.) is crucial for local SEO. This helps patients find the nearest healthcare facility when searching for specific services, such as "healthcare clinics near me." If your location is within their relevant vicinity, this could set you apart from local competitors.



#### **Develop your Organization's Content Knowledge Graph**

Implementing proper Schema Markup can help your organization **develop a reusable content knowledge graph**.

Your content knowledge graph is a collection of relationships between the entities defined on your website using Schema Markup. It is a data layer that enables machines to gain contextual information about your entities, seek existing information and infer new knowledge about your organization.

Gartner's <u>2024 Emerging Tech Impact Radar report</u> identified *Knowledge Graphs* as a critical software enabler and an essential investment for generative Al adoption as it "improv[es] the explainability and utility of LLM implementations within the organization".

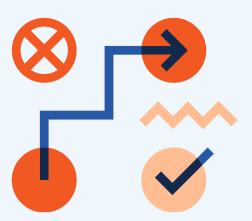
We're seeing more healthcare organizations invest in generative AI chatbots to improve customer experience. By developing a content knowledge graph using your website content, your team will have a reliable data layer to <a href="mailto:train">train</a> and ground your LLM with domain-specific knowledge to generate more accurate results at a lower cost.

## A robust Schema Markup strategy is essential to maximizing the benefits of this SEO tactic.

Building a Schema Markup strategy involves selecting Schema.org types that align with your page's content and the specific rich results you aim to achieve. This strategic planning ensures a targeted and effective Schema Markup implementation tailored to your goals.



# Creating a Schema Markup Strategy



There is no one-size-fits-all approach to building a Schema Markup strategy. How you mark up your page will differ depending on your specific goals and the unique content on each page.

Using the correct types and properties in your Schema Markup is vital to helping search engines better understand your content, leading to a more accurate representation of your healthcare information in search.

#### In this next section, we will teach you:

- How to mark up different types of healthcare page content (i.e. Home page, Physicians page, Hospital page, Recipe page, Job Posting page, etc.)
- What metrics you can use to measure the success of your strategy

By the end of this eBook, you should be equipped to develop a comprehensive and informed Schema Markup strategy for your healthcare organization.



## **Home Page**



The homepage of your healthcare organization serves as its digital front door, offering users a snapshot of your organization's identity, services, and key information.

#### **Recommended Schema Type: Medical Organization**

We recommend using the <u>MedicalOrganization</u> schema type for your healthcare organization's homepage. Schema.org defines this type as "a medical organization (physical or not), such as hospital, institution or clinic."

Utilizing the MedicalOrganization type allows you to identify your organization as an entity and include essential details such as your organization's name, logo, contact information, social media profiles, and any other relevant identifiers in your markup.

#### Rich Result Opportunity: N/A

Google utilizes <u>Organization markup</u> in knowledge panels and other visual elements, such as attribution, within its SERP. And since MedicalOrganization is a subtype of <u>Organization</u>, your MedicalOrganization markup will also be eligible for the same visual enhancements on the SERP.

While the knowledge panels and attributions might not look like a typical rich result, they can help users find information about your organization more efficiently and support your customer's journey.

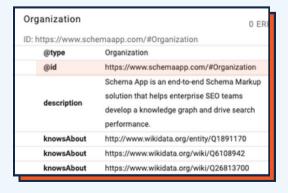
We recommend employing <u>Google's recommended list of properties</u> and including as many other relevant properties under the Organization type to ensure your brand is accurately represented on Google's knowledge panels.



## Pro Tip: Add a unique resources identifier (URI) in your markup to disambiguate and connect the entities on your site

When applying your Schema Markup using JSON-LD, URIs are expressed with the '@id' attribute. By adding the '@id' attribute to the entities in your markup, you can seamlessly connect and refer to other defined entities on your site.

This allows search engines to understand the relationship between different entities on your site explicitly. Learn more about URIs <u>here</u>.



Example of an @id attribute for an Organization entity



## **Hospital or Location Page**



The hospital or location page of a healthcare organization's website serves as a detailed overview of a specific medical facility or clinic location within the organization. The page should provide users with information about the services, physicians, and/or facilities available at that particular location.

#### Recommended Schema Type: Hospital or MedicalClinic

The recommended Schema type for a healthcare organization's hospital or location page is <u>Hospital</u> or <u>MedicalClinic</u>, depending on the page's content.

#### Rich Result Opportunity: Local Business & Review Snippet

Google utilizes <u>LocalBusiness structured data</u> in knowledge panels for local businesses. Since Hospital and MedicalClinic are both subtypes of <u>LocalBusiness</u>, they are both eligible for the visual enhancement feature on the SERP if marked up according to Google's requirements.

If you have reviews or ratings on your page, you can nest <u>Review</u> and <u>AggregateRating</u> markup under your top-level <u>Hospital</u> or <u>MedicalClinic</u> markup to be eligible for a <u>Review Snippet</u>.

#### **Location Page Best Practices**

- **Utilize the** openingHours property in your markup. Google tends to prioritize and display establishments open at the user's time of search. For instance, if a user was searching for "Hospital near me" and Google understands that your hospital is open at that time, they are more likely to show your listing to the user.
- Build E-E-A-T by utilizing properties such as <a href="https://hascortification">hasCertification</a>, <a href="https://award">award</a>, and <a href="https://medicalSpecialty">medicalSpecialty</a>. Prioritizing experience, expertise, authoritativeness, and trustworthiness (E-E-A-T) is vital for healthcare organizations because it can impact the visibility of your content on the SERP. Healthcare content is considered a Your Money Your Life (YMYL) topic. If your page has strong E-E-A-T, Google is more likely to view your content as helpful and showcase it on the SERP.
- Use entity linking for location-related properties like <u>address</u>, <u>areaServed</u> and other location-related properties. Adding these properties can clarify the location of your Hospital or Medical Clinic. However, you can further disambiguate your location by linking to known entities for these locations on external authoritative knowledge bases like Wikipedia, Wikidata, and Google's Knowledge Graph. Learn more about entity linking <u>here</u>.



## **Physicians Page**



A healthcare organization's physician page usually provides detailed information about individual healthcare professionals, including doctors, specialists, and other medical practitioners affiliated with the organization. This page offers patients and customers a comprehensive overview of a specific physician's background, expertise, and services, with the call to action typically being to book an appointment.

#### Recommended Schema Type: IndividualPhysician

The recommended schema type for a healthcare organization's physician page is <u>IndividualPhysician</u>.

Alternatively, you can use the <u>Physician</u> type to markup your physician page. However, as explained in <u>this article</u>, the definition of the Physician type could refer to an individual physician or a physician's office.

Therefore, if your page is about the physician, we recommend using the IndividualPhysician subtype. If your page is about the clinic that the physician works in, we recommend using the <a href="https://example.com/PhysiciansOffice">PhysiciansOffice</a> subtype instead.

#### Rich Result Opportunity: Review Snippet

The IndividualPhysician type alone will not yield any rich results on Google. However, if your physician page includes reviews and ratings for the physician, you can nest <u>Review</u> and <u>AggregateRating</u> markup within your top-level IndividualPhysician type.

This will make your physician page eligible for a Review Snippet on the SERP, showing the overall rating and some reviews directly in the search listing.

See Schema.org's documentation for the list of available properties for the <u>IndividualPhysician type</u>.



#### Pro Tip: Utilize properties that can build your Physician's E-E-A-T

Properties such as <a href="https://new.ncbi.nlm.nih.google-right-nih.goog

Remember, you can only markup content that is visible on your page. If you do not have content about the physician's certifications or affiliations, we recommend adding the relevant content before utilizing the properties in your markup.



### **Medical Procedures or Services**



The services and medical procedures pages of your healthcare organization's website provide comprehensive information about the range of healthcare services, medical procedures, and treatments offered by the organization.

These pages should inform customers about the healthcare options available, fostering transparency and enabling them to make informed decisions.

#### Recommended Schema Type: MedicalProcedure or Service

Depending on the page's content, you can use the <u>MedicalProcedure</u> or <u>Service</u> type. How do you determine the schema type for your page?

**Use the MedicalProcedure type** if your page specifically focuses on a particular medical procedure, such as surgery. This is suitable when the content delves into the details of the actual procedure being performed, providing a more specific and granular view of the subject of care.

**Use the Service type** if your page discusses a broader topic like bariatrics, emphasizing the overall service being provided. In these cases, the conversation is at a higher level, encompassing a range of services, some of which may include specific medical procedures.

#### Rich Result Opportunity: N/A

There are no rich result opportunities for the MedicalProcedure or Service schema types. That said, you can still utilize your Schema Markup to connect the entities on this page to other entities on your site to be more <u>semantic</u>. Connecting the entities across your site is crucial for establishing clear relationships and hierarchy between your organization's entities. It provides search engines with more contextual information, helping them better understand your content.

For example, the Hospital type has the property <u>availableService</u>, and MedicalProcedure is one of the expected types for the availableService property.

Therefore, by identifying the MedicalProcedure entity on your medical procedure page, you can connect both entities to help search engines explicitly understand that your Hospital provides this specific Medical Procedure (that is defined on another page on your site).

```
<script type="application/ld+json">
{
    "@context": "https://schema.org",
    "@type": "Hospital",
    "@id": "https://www.healthex.com/location/san-diego/#Hospital",
    "url": "https://www.healthex.com/location/san-diego/",
    "name": "Healthex San Diego Hospital",
    "availableService": {
        "@type": "MedicalProcedure",
        "@id": "https://www.healthex.com/pacemaker/#MedicalProcedure",
        "url": "https://www.healthex.com/pacemaker/",
        "name": "Implantable Pacemaker",
        "bodyLocation": "Heart",
        },
}
</script>
```

Example of connecting the MedicalProcedure entity to the Hospital entity using availableService property



## **Articles & Blogs**



Articles and Blogs serve as a platform to share informative and engaging resources related to health, wellness, medical advancements, and various healthcare topics.

These pages are intended for education, engagement, community building, and E-E-A-T. They can also promote your organization's services, specialties, and expertise and strategically link to other pages within your organization.

#### Recommended Schema Type: Article or BlogPosting

Depending on how you choose to identify this page, you can use <u>Article</u> or its more specific subtype, <u>BlogPosting</u>.

In some instances, you can also multi-type these pages as both Article/BlogPosting and MedicalWebPage. This is helpful if you want to be very specific about the type of audience you are targeting.

MedicalWebPage has the property <u>medicalAudience</u>, allowing you to further define your target <u>MedicalAudience</u> with properties like <u>healthCondition</u>, <u>suggestedAge</u>, and <u>suggestedGender</u>.

#### Rich Result Opportunity: N/A

<u>Google</u> utilizes Article markup to show better title text, images and date information for the article in search results on Google Search, Google News, Top Stories, Google Assistant and more.

Even though these article features might not look like a typical rich result, adding Article markup to your page can help search engines and machines better understand the entities mentioned on your page and help you build a richer content knowledge graph.



#### Pro Tip: Call out the author within your Article or BlogPosting markup

<u>Google</u> recommends calling out the author within your Article / BlogPosting markup. If there are multiple authors, ensure you specify each one individually. This enhances E-E-A-T by bolstering the expertise and authoritativeness of the content creators.





## Recipes



Healthcare organizations will, at times, create recipe pages to provide patients or customers with health-conscious recipes that align with the organization's commitment to promoting overall well-being.

This page type is intended to offer an educational resource for individuals seeking guidance on healthy eating habits and lifestyle choices.

#### Recommended Schema Type: Recipe

We recommend using the <u>Recipe</u> type for your recipe pages.

Some properties you could include are: <u>recipeInstructions</u>, <u>recipeIngredient</u>, <u>cookingMethod</u>, <u>nutrition</u>, <u>recipeCategory</u>, <u>suitableForDiet</u>, <u>recipeYield</u>, <u>cookTime</u>, <u>datePublished</u>, <u>reviews</u>, <u>video</u>.

#### Rich Result Opportunity: Recipe Rich Result

Your recipe page could be eligible for a Recipe rich result if marked up according to Google's Recipe Structured Data Documentation.

Visit <u>Google's Recipe Structured Data Documentation</u> for a full list of the required and recommended properties to be eligible for the recipe rich result.



#### Pro Tip: Include a star rating with your recipe

When you achieve a Recipe rich result with ratings and reviews, it will greatly enhance how your result shows up in the SERP and stands out. To mark this up, nest <u>Review</u> and <u>AggregateRating</u> markup under your top-level Recipe type.



## **Job Postings**



Job posting pages should provide job seekers with information about an open role that your organization is currently hiring for. The primary intent of this page is to provide job seekers with key information about the role, such as the job description, eligibility criteria, salary range, benefits, and qualifications requirements.

#### **Recommended Schema Type: JobPosting**

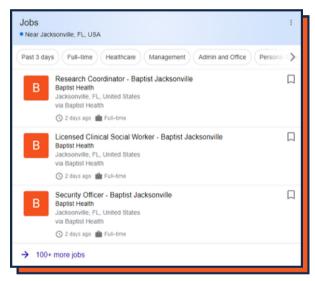
You can use the <u>JobPosting</u> type for your job posting page. See Schema.org's documentation for the list of properties under <u>JobPosting</u>.

#### **Rich Result Opportunity: Job Posting Rich Result**

Your individual job posting pages, if marked up properly, could be eligible for a Job Posting rich result.

Google has a strict list of content policies that web publishers have to abide by to be eligible for the Job Posting rich result. This ensures that job seekers have a fair job-hunting experience on Google.

Examples of content that violates these policies include incomplete job descriptions, posting for fake or non-existent jobs, and jobs without a way to apply.



Example of a Job Posting Rich Result

If you want to achieve a Job Posting rich result, we recommend reviewing <u>Google's Job Posting Structured Data content policies</u> thoroughly to ensure your content meets the eligibility criteria of this rich result.

The required properties for this rich result, as indicated in Google's documentation, include <u>datePosted</u>, <u>description</u>, <u>hiringOrganization</u>, <u>jobLocation</u>, and <u>title</u>. Additional recommended properties are also available to further enhance the rich results.



# Measuring ROI from Healthcare Structured Data



There are many different reasons why your organization might want to implement structured data. Whatever the reason, understanding your objectives will guide your measurement approach and help you evaluate success *meaningfully*.

When choosing which rich result to target or how to best markup your page, you want to align your Schema Markup strategy with your organizational goals.

Looking to hire? Consider the JobPosting rich result eligibility.

Looking to educate your market? Article rich results are ideal.

Looking to convert and book appointments? Review snippets for physicians would best serve this goal.

Once your goals and strategy have been established, you can choose the right metrics to measure how your markup is performing and whether you are tracking in the right direction.

#### **Measurable Benefits of Structured Data**

You can measure success through quantitative metrics such as impressions, clicks, and click-through rates using platforms like Google Search Console (GSC) or <u>Schema</u> <u>Performance Analytics</u>.

These are some examples of goals set by <u>our healthcare customers</u> when creating their Schema Markup strategy:

- Increase visibility with X organic clicks
- Increase listing impressions by X%
- Increase physician referrals by X%
- Increase CTR when rich result is awarded
- Increase brand visibility and content available to customers through rich results
- Get more online appointments booked



#### **Key Metrics to Monitor**



#### **Clicks and Impressions**

Clicks and impressions provide insights into the reach and engagement levels of your content in search engine results.



#### **Click-Through Rate (CTR)**

A higher CTR indicates that your rich results (or even regular search results) are compelling users to click through to your website, contributing to increased visibility.



#### **Conversions**

For a healthcare organization, conversions may include metrics such as appointment bookings, newsletter sign-ups, job applications, or other relevant actions. For example, many of our customers see a measurable increase in job applications when structured data is applied and JobPosting rich results are achieved.

To effectively gauge the impact of structured data, it's critical to analyze internal data before and after its implementation on converting pages. This analysis helps discern whether the structured data efforts specifically contribute to the observed increase in conversions amidst the many factors influencing conversion rates.



#### **Keywords**

Appearing for more relevant search queries indicates that your Schema Markup aligns well with user intent, enhancing the chances of your content being prominently displayed in the SERP. Monitoring keyword performance allows you to gauge the impact of your markup on search visibility and ensures that your content reaches the right audience.

#### **Interpreting the Data**

Rich results can impact your web traffic and user engagement in various ways. While they can increase click-through rate, they may also reduce overall traffic, especially when search engines provide direct answers on the SERP. It's important to recognize that a decrease in traffic doesn't necessarily equate to poor performance.

For instance, a reduction in irrelevant impressions and an increase in clicks could indicate that you are effectively targeting a more qualified audience.

Therefore, it is important to measure the outcomes of your Schema Markup strategy and continue optimizing your markup based on your new learnings.

## The Evolution of Schema Markup from Rich Results to Al Understanding

As mentioned earlier, most search engines now rely on large language models (LLMs) and Al to provide relevant search results. However, these LLMs are prone to hallucinations and inaccurate interpretations of content.



Schema Markup, on the other hand, is a factual source of information that can be used to train and ground these LLMs. Therefore, Google wants web publishers to provide them with Schema Markup and uses rich results to incentivize this action.

In the past, most organizations focused solely on rich result eligibility in their Schema Markup strategy. As such, they would implement the minimum Schema Markup required to be eligible for their desired rich result and neglect applying connected Schema Markup to enhance search engine understanding.

Organizations that want to stay competitive in this new era of Al-powered search and LLMs cannot focus solely on doing Schema Markup to achieve rich results. They must implement proper Schema Markup to showcase the relationship between the entities on their site and beyond to create a <u>reusable content knowledge graph</u>.

Your content knowledge graph disambiguates your entities and showcases the relationships between the entities on your site. This enables search engines to infer knowledge about your organization and provide users with more accurate and relevant search results. It also gives your organization control over how your brand is perceived on the SERP.

The value of Schema Markup in ensuring your content is correctly understood is now significantly more strategic than just achieving rich results alone.



## Start Your Structured Data Journey

Embarking on the journey of implementing Schema Markup for your healthcare website is a strategic move that can transform your digital front door. If you haven't started this process yet, now is the perfect time to do so.

Start by crafting a comprehensive strategy. This not only helps you set the course and clear goals for your Schema Markup implementation but also enables you to identify critical content gaps to improve your eligibility for rich results and enhance search engine understanding.

For those who already have some markup in place, it's never too late to apply a more thorough strategy. This approach helps pinpoint areas for improvement and ensures that your content aligns seamlessly with the evolving landscape of search.

Remember, Schema Markup is an ongoing process that requires continuous management. With Google's evolving algorithms, updates to the Schema.org vocabulary and structured data documentation, and internal changes to your site content, organizations must have a scalable Schema Markup solution to manage this SEO strategy for long-term success.

If your team lacks the expertise or tools to manage your Schema Markup at scale, we can help!

At Schema App, we offer an end-to-end Schema Markup solution for enterprise SEO teams. From developing a tailored Schema Markup strategy to implementing and managing it at scale, we will work with your team to ensure your organization can leverage the power of Schema Markup to stand out in search and drive Al performance.

<u>Contact us today</u> to learn more about our Schema Markup solution.

**Contact Us** 







## Schema Markup Training Resources

Building your Schema Markup strategy is only the beginning of your Schema Markup journey. We've created a series of free training resources and guides to help organizations like yours navigate the complex topic of Schema Markup.



#### **Online Video Training Resources**

- Schema Markup 101 Learn the basics of Schema Markup
- Content Knowledge Graph Fundamentals Learn how to leverage Your content knowledge graphs for SEO
- Schema App Tools Training Learn how to create and generate your Schema Markup using the Schema App platform

#### **Guides & eBooks**

- **Guide to Entities & Knowledge Graphs for SEO** Learn to define the entities on your site and develop your content knowledge graph using Schema Markup
- **Preparing for Generative AI Search: Essential Strategies and Insights** Learn three things you can do today to prepare for generative AI search.

#### Articles

- 4 Basic SEO Factors to Consider Before Doing Schema Markup
- Guide to the Schema.org Vocabulary
- How to Manage Your Schema Markup
- How to Optimize Your Content to Achieve Google's Rich Results
- Knowledge Graph: Value of Schema Markup Beyond Rich Results
- Evolving Role of Schema Markup: From Rich Results to AI Understanding
- How to Leverage Your Schema.org Knowledge Graph for LLMs Like ChatGPT

