

SUCCESS STORY

Stack Overflow puts Elasticsearch at the heart of its generative AI experience for developers

Stack Overflow puts Elastic at the heart of OverflowAI powered by Azure OpenAI, a new search tool that enables developers to retrieve trusted information from a knowledge base of 60 million questions and answers.

Region

United States

Industry

Software & Technology

Solution

Elastic Search, Azure OpenAI



Strengthens trust in generative AI

- Stack Overflow users can employ generative AI safely, knowing that search results are sourced and validated by a community of human experts.
- Powered by Azure OpenAI and Elasticsearch Stack Overflow enriches customer data with vector embeddings to perform semantic search for more relevant answers.



Supports core-business innovation

- With Elastic taking care of advanced search features, Stack Overflow can focus on innovating itscore online knowledge-based business.



Delivers best-in-class AI search methods

- Thanks to Elastic, Stack Overflow seamlessly transitions from lexical to hybrid search and now conversational search using generative AI with complete confidence.

Stack Overflow combines the power of human experts with generative AI to accelerate the retrieval of trusted information from developer knowledge bases

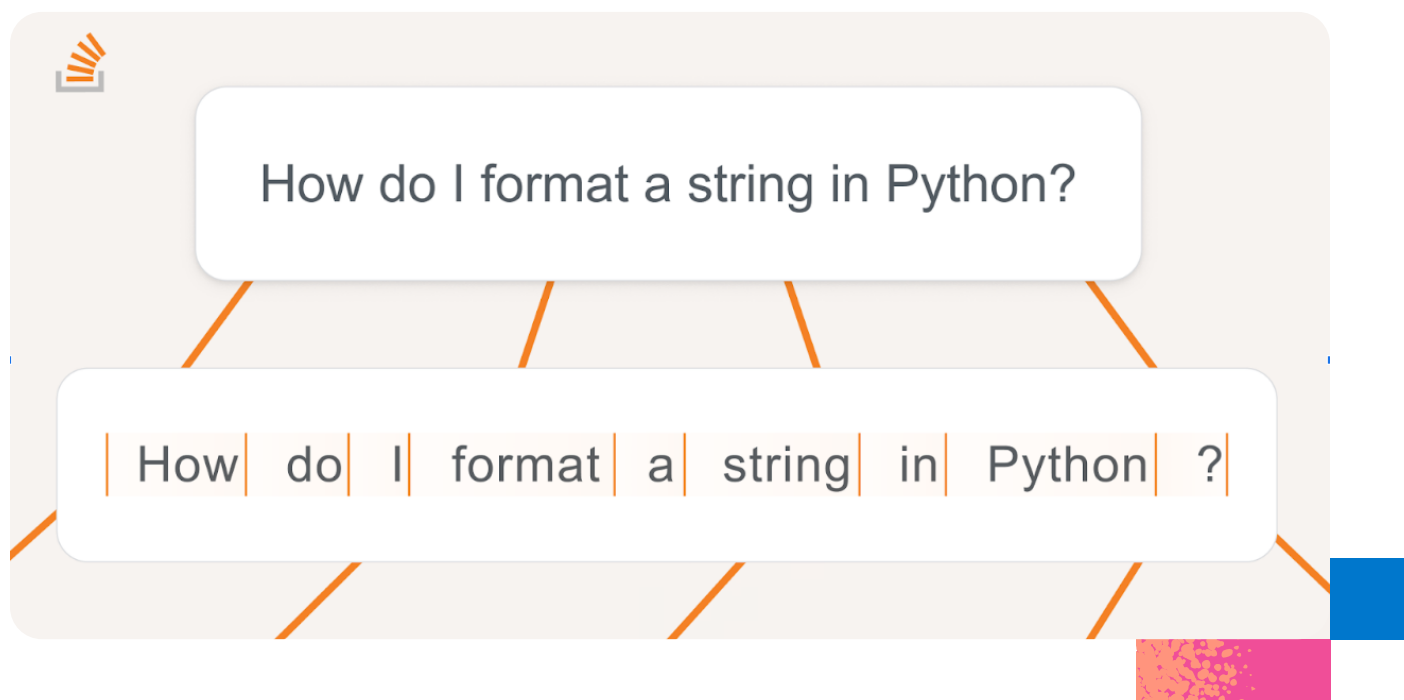
Imagine a world where millions of developers instantly share their expertise. That's the reality of [Stack Overflow](#), the go-to online knowledge base for software developers. Boasting more than 60 million questions and answers on every conceivable technology topic, Stack Overflow empowers developers to solve problems, learn new skills, and advance their careers.

[Elastic Search](#) has always been a cornerstone for Stack Overflow's solutions. In addition to its use on Stack Overflow's public platform, Elastic provides the search technology for Stack Overflow for Teams, its SaaS solution used by over 15,000 organizations for their own private, enterprise knowledge bases.

Over the years, Stack Overflow benefitted from Elastic's innovative roadmap, making use of its native connectors that enable enterprise customers to quickly populate Stack Overflow for Teams with large volumes of useful information from other platforms like GitHub, Jira, and Confluence. Customers don't have to wait for their employees to start populating their Teams instance of Stack Overflow with information, accelerating employee productivity.

Prashanth Chandrasekar, CEO, Stack Overflow, says, "Elastic handles the heavy lifting of search functionality on our platforms so that we can focus on delivering a superior knowledge experience."

Now, the business is putting Elastic Search at the heart of OverflowAI, a new platform that combines hybrid search with generative AI to deliver fast, accurate, and trustworthy information to developers.





Building trust with generative AI

Today, Stack Overflow is pioneering the use of AI in the developer community with the launch of OverflowAI. Based on the latest advances in generative AI, this new feature set draws on information held in the public platform and a company's private instance of Stack Overflow for Teams.

By merging these sources, OverflowAI ensures users have access to the most relevant information at critical moments – whether they're debugging code, tackling a technical challenge, assessing risks, or seeking deeper context on specific technologies.

To succeed, Stack Overflow had to overcome one critical challenge. “Our research revealed that while 70% of developers are turning to AI tools for increased productivity and learning, only 42% have faith in their accuracy,” says Chandrasekar.

This is where Elastic plays a pivotal role. Elasticsearch powers generative AI through [semantic search](#), helping developers draft better questions for the developer community. Users also benefit from summaries of combined results drawn from Stack Overflow's knowledge base along with insights from their colleagues using Stack Overflow for Teams.

Crucially, OverflowAI cites contributions from highly trusted individuals within the Stack Overflow community. These could be the world's best JavaScript programmers or a company's top Python developer, as evidenced by the citations and links embedded within the summaries. By highlighting these sources, Stack Overflow builds trust into AI-generated responses.



The upcoming launch of OverflowAI, based on Elasticsearch, marks a significant milestone. We look forward to extending our AI feature set with Elastic's support in the coming months.

Prashanth Chandrasekar
CEO, Stack Overflow

One partner, many AI advantages

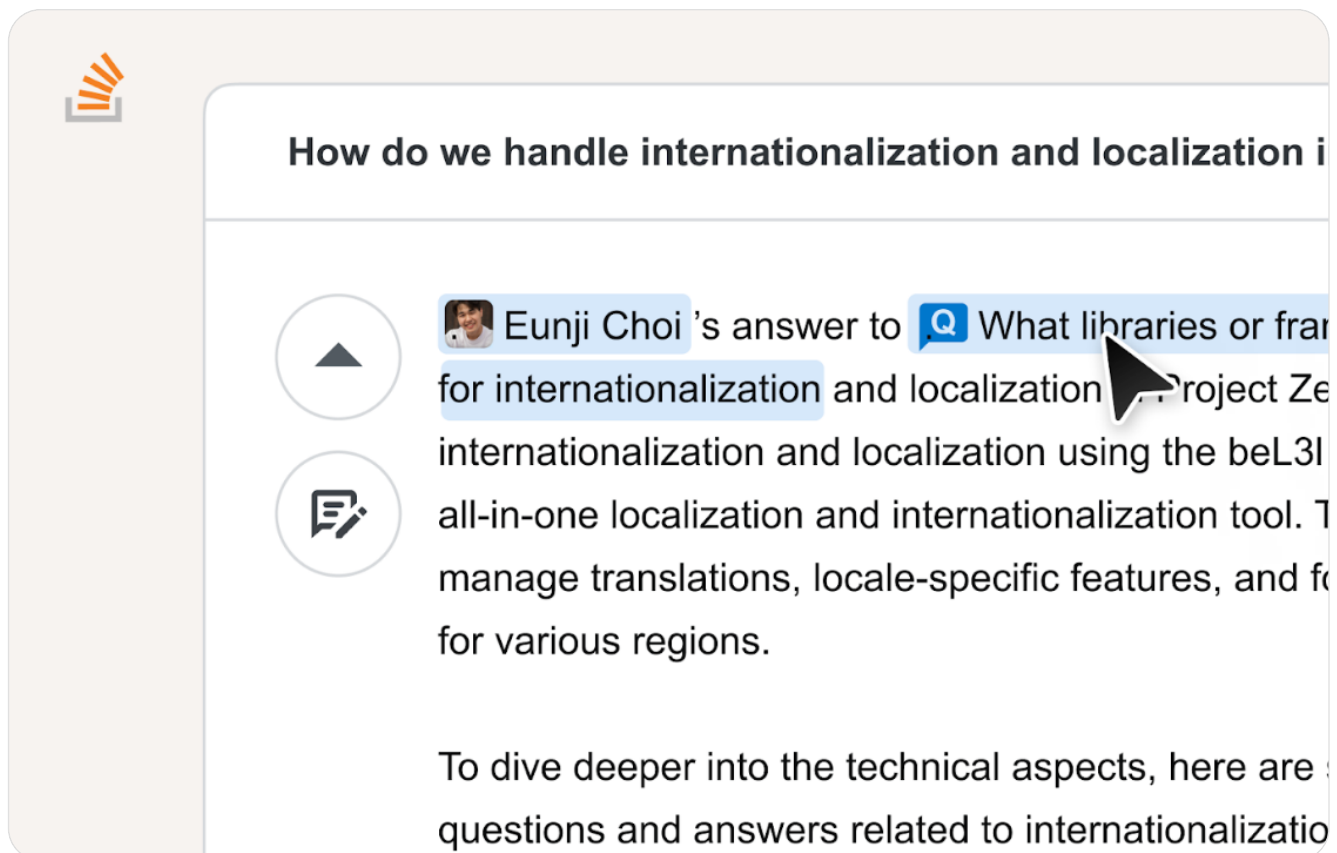
Chandrasekar says that his team evaluated other vendors for OverflowAI, but Elastic's combination of search experience and non-stop innovation made it the perfect choice.

"Stack Overflow enjoys a long-standing relationship with Elastic, enabling us to seamlessly transition from lexical search to a hybrid approach and now incorporate the powerful capabilities of generative AI," says Chandrasekar. As a result, Stack Overflow can leverage its existing collaboration with Elastic to thrive in the new world of generative AI.

Stack Overflow also benefits from its long-term partnership with the Elastic team. "We consider Elastic a fantastic partner that understands how to prioritize the success of our team and our clients," says Chandrasekar. "There's been a continuous exchange of valuable feedback throughout our collaboration on different search methods."

Above all, Stack Overflow and Elastic address the two key challenges developers face: finding accurate information and retrieving it efficiently.

Stack Overflow solves the first part with its curated and trusted knowledge base. Elastic, the search AI company, tackles the second by enabling users to find this information quickly and precisely. "Elastic's responsiveness to our feedback has been instrumental. Our CTO and engineering team particularly appreciate their agility, as we gear up for new launches," says Chandrasekar.



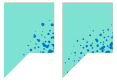
The screenshot shows a Stack Overflow interface. On the left is a sidebar with an orange logo and navigation icons. The main content area displays a question titled "How do we handle internationalization and localization in Project Zeppelin?" and an answer by Eunji Choi. The answer discusses using the beL3I all-in-one localization and internationalization tool to manage translations, locale-specific features, and more for various regions. A mouse cursor is pointing at the question title.

How do we handle internationalization and localization in Project Zeppelin?

Eunji Choi's answer to **What libraries or frameworks are used for internationalization and localization in Project Zeppelin?**

internationalization and localization using the beL3I all-in-one localization and internationalization tool. To manage translations, locale-specific features, and more for various regions.

To dive deeper into the technical aspects, here are some questions and answers related to internationalization and localization.



With Elasticsearch, we can stay true to the original promise of Stack Overflow by keeping our developer community at the center, ensuring that trust and attribution are at the core of what we build, and recognizing the people who contribute their knowledge for their efforts.

Prashanth Chandrasekar

CEO, Stack Overflow

Build cost-effective and secure AI apps that are accurate and relevant using Elastic's vector database, out of the box semantic search, and transformer model flexibility.

[Start now](#)