

ServiceNow and Hugging Face release StarCoder, an open-access large language model for code generation

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The open-access, open-science, open-governance 15 billion parameter StarCoder LLM makes generative AI more transparent and accessible to enable responsible innovation at scale

SANTA CLARA, Calif. — May 4, 2023 — **ServiceNow** (NYSE: NOW), the leading digital workflow company making the world work better for everyone, today announced the release of one of the world’s most responsibly developed and strongest-performing open-access large language model (LLM) for code generation. Led by **ServiceNow Research** and **Hugging Face**, the open-access, open-science, and open-governance 15 billion parameter StarCoder LLM makes generative AI more transparent and accessible to enable responsible innovation at scale.

The StarCoder model is designed to level the playing field so developers from organizations of all sizes can harness the power of generative AI and maximize the business impact of automation with the proper governance, safety, and compliance protocols. This new LLM marks the next major milestone in the **BigCode Project**, an ambitious initiative to develop state-of-the-art AI systems for code in an open and responsible manner with the support of the open-scientific AI research community.

“ServiceNow’s collaboration with Hugging Face expands our longstanding commitment to AI excellence,” said Harm de Vries, lead of the Large Language Model Lab at ServiceNow Research and co-lead of BigCode. “New, responsible AI practices to train and share large language models are vital to ensuring the right protocols, safeguards, and permissive licenses are in place for our customers, and StarCoder is making this possible.”

"The joint efforts led by Hugging Face and ServiceNow enable the release of powerful base models that empower the community to build a wide range of applications more efficiently than a single company could come up with," said Leandro von Werra, machine learning engineer at Hugging Face and co-lead of BigCode. "This endeavor is a testament to the potential of open-source as we work toward democratizing AI."

Trained with a trillion tokens of permissively licensed source code covering over 80 programming languages from BigCode's The Stack v1.2 dataset, StarCoder can be deployed to bring pair-programming like generative AI to applications with capabilities like text-to-code and text-to-workflow. With this, StarCoder gives professional software engineers the power to tackle the most complex programming challenges and empowers citizen developers to build new software regardless of technical ability—accelerating AI innovation at scale. The model will be released with open-access on the Hugging Face platform **Code Open RAIL-M license** to permit royalty-free distribution. Unlike traditional open-source software released without use case restrictions, BigCode releases the model with a **responsible AI model license** that includes use case restrictions that apply to modifications of the model, and applications using the model - for example, to restrict the models from being used to generate or distribute malicious code to harm electronic systems. Supporting code has been open sourced on the **BigCode project's GitHub**.

ServiceNow Research and Hugging Face, which works on some of the world's largest AI and LLM initiatives, launched the joint BigCode Project in September 2022. The project continues to operate as an open scientific collaboration, as the two companies harness the collective brainpower and resources from the open-source community through BigCode working groups, task forces, and meetups.

Beyond key partnerships and collaborations, ServiceNow is continuously embedding enterprise AI capabilities across the Now Platform to fulfill its mission of being the world's most intelligent platform for end-to-end digital transformation. In the last three years alone, ServiceNow has expanded its portfolio with several notable AI acquisitions, including **Attivio**, **Element AI**, and **Hitch Works**, bringing practical, purpose-built AI capabilities to the Now Platform. Most recently, ServiceNow introduced new AI-based tools within the **Now Platform Utah release** to help organizations maximize efficiency, accelerate ROI, and create more simplified, connected experiences.

For more information on StarCoder, please visit <https://huggingface.co/bigcode>.

About ServiceNow

ServiceNow (NYSE: NOW) makes the world work better for everyone. Our cloud-based platform and solutions help

digitize and unify organizations so that they can find smarter, faster, better ways to make work flow. So employees and customers can be more connected, more innovative, and more agile. And we can all create the future we imagine. The world works with ServiceNow™. For more information, visit: www.servicenow.com.

About Hugging Face

Hugging Face is the leading open-source and community-driven AI platform, providing tools that enable users to build, explore, deploy and train machine learning models and datasets. For more information, visit: huggingface.co.

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Media Contact:

Jacqueline Velasco

(408) 561-1937

press@servicenow.com