Title: BLOOM (language model)

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The BigScience Large Open-science Open-access Multilingual Language Model (BLOOM) is an open-access large language model (LLM). [1] It was created by a volunteer-driven research effort to provide a transparently-created alternative to proprietary AI models. [2]

With 176 billion parameters, BLOOM is a transformer -based autoregressive model designed to generate text in 46 natural languages and 13 programming languages. The model, source code, and the data used to train it are all distributed under free licences, allowing for public research and use. [3] [4]

Development

BLOOM is the main outcome of the BigScience initiative, a one-year-long research workshop that took place from May 2021 to May 2022. [5] The project was led by HuggingFace and involved several hundred volunteer researchers and engineers from academia and the private sector. The model was trained between March and July 2022 on the Jean Zay public supercomputer in France, managed by GENCI and IDRIS (CNRS). [6]

BLOOM's training corpus, named ROOTS, combines data extracted from the then-latest version of the web-based OSCAR corpus (38% of ROOTS) and newly collected data extracted from a manually selected and documented list of language data sources. In total, the model was trained on approximately 366 billion (1.6TB) tokens. [7] [8]

External links

Bigscience project on HuggingFace

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