## Top Ten List of LLMs in Open Source Arena



Model Family Name	Created By	Sizes	Versions	Pretraining Data	Fine-tuning and Alignment Details	License	What's interesting	Architectural Notes
Qwen 1.5	Alibaba Cloud	0.5B, 1.8B, 4B, 7B, 14B, 72B	Base and chat	Undisclosed	Alignment with DPO	<u>Tongyi Qianwen</u>	Models excel in 12 languages; Qwen 1.5 72B Chat currently the top non-proprietary model on Chatbot Arena	Uses SwiGLU activation, attention QKV bias, GQA, and combines sliding window attention with full attention
Yi	<u>01.Al</u>	6B, 9B, 34B	Base and chat	A curated dataset of 3.1 trillion English and Chinese tokens derived from CommonCrawl through cascaded data deduplication and quality filtering	Base models underwent SFT using 10K multi-turn instruction-response dialogue pairs, refined through several iterations based on feedback	<u>Yi Series Models</u> <u>Community License</u> <u>Agreement</u>	Innovative data cleaning pipeline and data quality over quantity for fine tuning; 200k context window	SwiGLU activation, GQA, and RoPE
Smaug	<u>Abacus.Al</u>	72B, 34B	Chat	72B - same as Qwen 1.5 72B; 34B - same as Yi 34B	Alignment with Direct Preference Optimization-Postivie (DPOP)	72B - <u>Tongyi Qianwen;</u> 34B - <u>Yi Series Models</u> <u>Community License</u> <u>Agreement</u>	First model to surpass an average of 80% on Open LLM Leaderboard	72B - same as Qwen 1.5 34B - same as Yi
Mixtral-8x7B	<u>mistralai</u>	46.7B parameters, uses only 12.9B parameters per token	Base and instruct	Undisclosed	Undisclosed	<u>Apache 2.0</u>	Sparse Mixture of Experts (MoE) model; MT Bench score of 8.3	MoE using 8 <u>Mistral-7B</u> models
DBRX	<u>Databricks</u>	132B parameters; uses only 36B per input	Base and instruct	Carefully curated dataset comprising 12T tokens from text and code data; employed curriculum learning strategies	Undisclosed	<u>Databricks Open Model</u> <u>License</u>	Fine-grained MoE model, using 4 out of 16 experts per input	Uses GLU, RoPE, and GQA; GPT-4 tokenizer
SOLAR-10.7B	<u>Upstage</u>	10.7B	Base and instruct	Same as Mistral 7B (undisclosed)	Instruction tuning employed Alpaca- GPT4, OpenOrca, and Synth. Math- Instruct datasets; alignment tuning used Orca DPO Pairs, Ultrafeedback Cleaned, and Synth. Math- Alignment datasets	<u>Apache 2.0</u>	Depth upscaling, starting with a Llama 2 7B architecture with Mistral 7B weights, adding layers to increase model depth, followed by continued pretraining	Depth upscaled Llama 2 7B architecture
TÜLU v2	Allen Institute for <u>Al</u>	7B, 13B, 70B	Instruct and chat	Same as Llama 2	SFT on the TULU-v2-mix dataset; DPO alignment on the UltraFeedback dataset	<u>Al2 ImpACT Low-risk</u> <u>license</u>	DPO significantly enhances model performance on AlpacaEval benchmark while maintaining performance on other tasks	Same as Llama 2
WizardLM	<u>WizardLM</u>	7B, 13B, 30B, 70B	Base and instruct	Same as Llama	Fine-tuning using the Evol-Instruct approach, which uses LLMs to generate complex instructions	<u>Llama 2 Community</u> <u>License</u>	Use of LLMs to automatically rewrite an initial set of instructions into more complex ones	Same as Llama
Starling 7B Alpha	<u>Berkeley</u>	7B	Chat	Same as Mistral 7B	Trained from Openchat 3.5 7B using RLAIF and Advantage-induced Policy Alignment (APA)	<u>LLaMA</u> license	Use of Nectar dataset consisting of 3.8M GPT4 labeled pairwise comparisons to train a reward model; MT Bench score of 8.09	Same as Mistral 7B
OLMo	<u>Allen</u> Institute for <u>Al</u>	1B, 7B	Base, SF and instruct	Trained on Dolma using the AdamW optimized	SFT using the TULU 2 dataset followed by aligning with distilled preference data using DPO	<u>Apache 2.0</u>	Release fosters collaborative research, providing training data, training and evaluation code, and intermediate checkpoints	SwiGLU activation, RoPE, and BPE-based tokenizer
Gemma	<u>Google</u> <u>Deepmind</u>	2B, 7B	Base and instruct	6T tokens of text, using similar training recipes as Gemini	SFT on a mix of synthetic and human-generated text and RLHF	Gemma Terms of Use	Instruct model uses formatter that adds extra information during training and inference	GeGLU activations, RoPE and RMSNorm; 2B uses MQA and 7B uses MHA
DeciLM-7B	<u>Deci</u>	7B	Base and instruct	Undisclosed	LoRA finetuned on SlimOrca	<u>Apache 2.0</u>	Use of Variable GQA and efficient architecture generated using NAS technology	SwiGLU activations, RoPE, and Variable GQA