WIKIPEDIA 25
25 years of the free encyclopedia

Lists of open-source artificial intelligence software

These **lists include projects which release at least some of their software under open-source licenses** and are related to artificial intelligence projects. These include software libraries, frameworks, platforms, and tools used for machine learning, deep learning, natural language processing, computer vision, reinforcement learning, artificial general intelligence, and more.

Agentic AI

- Auto-GPT — experimental open-source autonomous GPT-based agent
- BabyAGI — lightweight task-planning autonomous agent[1]
- CrewAI — multi-agent orchestration framework for AI agents[2]
- LangChain – framework for integrating LLMs into applications
- MetaGPT — multi-agent software development framework[3]
- OpenClaw — autonomous task-executing AI agent framework
- SuperAGI — framework for autonomous AI workflows[4]

AI hardware and inference acceleration

- OpenVINO – Intel's toolkit for optimizing deep learning models for edge devices
- ONNX – Open Neural Network Exchange format for interoperability between AI frameworks

Artificial neural networks

- EDLUT – event-driven neural network simulator for large-scale spiking networks
- Emergent – cognitive modeling platform implementing connectionist neural networks
- Encog – machine learning framework for Java and C# supporting neural networks
- JOONE – Java-based neural network framework with modular architecture for learning tasks
- Nengo – Python library for building and simulating large-scale neural systems
- Neuroph – lightweight Java framework for creating neural networks
- OpenNN – C++ library for designing, training, and deploying neural networks
- SNNS – Stuttgart Neural Network Simulator, supports feedforward and recurrent neural networks

Chatbots

- LAION OpenAssistant

- Mycroft

Cognitive architectures and AGI platforms

- OpenCog – project that aims to build an open source artificial intelligence framework
- Soar – cognitive architecture for decision-making and learning in Intelligent agents
- CLARION – Connectionist Learning with Adaptive Rule Induction On-line, hybrid connectionist/symbolic cognitive architecture.

Computer vision and image processing

- AForge.NET – computer vision, artificial intelligence, and robotics library for the .NET framework
- Dlib – C++ library for computer vision and image processing
- OpenCV — library of programming functions mainly for real-time computer vision
- Tesseract – optical character recognition

Deep learning frameworks

- TensorFlow – end-to-end open-source platform for machine learning developed by Google Brain[5]
- PyTorch – deep learning framework developed by Meta AI[5]
- PyTorch Lightning – high-level framework built on top of PyTorch for organizing and scaling deep learning models
- Keras – Python library for artificial neural networks and integrated into TensorFlow library
- MXNet – framework that trains and deploys deep neural networks
- Caffe – deep learning framework focused on speed and modularity
- Chainer – Python framework on top of NumPy and CuPy
- Theano – Python library and optimizing compiler for evaluating mathematical expressions and optimized for GPUs
- Deeplearning4j – Java library for the Java virtual machine and deep learning algorithms
- Neuroph – object-oriented artificial neural network framework written in Java
- Fast Artificial Neural Network (FANN) – C library for feedforward artificial neural networks

Convolutional neural networks (CNNs)

- AlexNet — pioneering CNN for image classification, won the 2012 ImageNet competition
- VGGNet — deep CNN known for its simplicity and use of 3x3 convolution filters
- Inception — CNN architecture using parallel convolutional layers of different sizes

Large language models

- Apertus[6]
- BERT – Google LLM
- DeepSeek – R1 and V3 models[7]

- Gemma 4 – Google LLM[8]
- GPT-1, GPT-2, and GPT-OSS – OpenAI LLMs[9]
- GPT-J – EleutherAI
- Grok-1 – xAI LLM
- Latam-GPT – Latin America-focused model[10][11]
- Mistral (some versions)[12]
- OLMo – Allen Institute for AI LLM
- Qwen (some versions) – Alibaba Cloud LLM[13]
- StarCoder – software development assistant[14][15][16]
- T5 – Google LLM
- XLNet – Google LLM

Machine learning or data mining

- Caffe — Image classification and image segmentation
- Scikit-learn — library built on top of NumPy, SciPy, and matplotlib
- Shogun — C++ library for large-scale machine learning
- mlpack — C++ header-only machine learning library
- Weka — collection of machine learning algorithms for data mining tasks
- Apache Mahout — scalable machine learning library for big data built on Hadoop and Spark
- Apache SystemDS — ML system for the end-to-end data science lifecycle
- Jubatus — online machine learning and distributed computing framework
- KNIME — modular data pipelining
- Orange — machine learning, data mining, data visualization, and data analysis.
- RapidMiner — predictive analytics
- fastText – Word embeddings developed by Meta AI
- XGBoost — machine learning library for gradient boosting

AutoML platforms

- TPOT – tree-based pipeline optimization tool using genetic programming
- Neural Network Intelligence – Microsoft toolkit for hyperparameter tuning and neural architecture search
- MindsDB – AutoML platform that embeds machine learning into SQL databases and applications

Natural language processing (NLP)

- Apache OpenNLP
- Apertium – rule-based machine translation platform.
- ChatScript – natural language engine and dialog management system
- General Architecture for Text Engineering – information extraction
- Gensim – topic modeling and document similarity analysis library
- GloVe – unsupervised learning algorithm for obtaining vector representations of words

- Mallet – Java "Machine Learning for Language Toolkit"
- MontyLingua – libraries and programs for symbolic and statistical NLP for both Python and Java
- Moses – statistical machine translation engine to train statistical models of text from a source language to a target language
- NiuTrans – statistical machine translation
- NLTK – natural Language toolkit for symbolic and statistical NLP
- Probabilistic Action Cores – interpreter for natural-language instructions for robotic applications
- spaCy – Python library
- Spark NLP – text processing library for advanced NLP for Python, Java, and Scala.
- Word2vec – obtaining vector representations of words

Speech recognition systems

- CMU Sphinx
- DeepSpeech
- Whisper

Reactive planning

- GOLOG – logic programming language, situation calculus, first-order logical language for reasoning about action and change.

Reinforcement learning frameworks

- KataGo – reinforcement learning agent designed for playing the game of Go

Robotics software

- ArduPilot
- CoppeliaSim
- Gazebo
- Mobile Robot Programming Toolkit
- OpenRTM-aist
- Paparazzi Project
- Player Project
- Python Robotics
- Robot Operating System
- TurtleBot
- Webots

Text to image

- Flux

- Stable Diffusion

Text to speech

- Festival Speech Synthesis System
- WaveNet
- eSpeak

Transformer libraries

- Hugging Face transformers library – Python library of pretrained transformer models for NLP, computer vision, speech, and more.
- Fairseq – Facebook AI Research's sequence-to-sequence learning toolkit for training custom transformer models[17]
- OpenNMT – neural machine translation framework that supports transformer architectures[18]

See also

Free and open-source software portal

- Open-source artificial intelligence
- List of artificial intelligence journals and List of artificial intelligence books
- List of artificial intelligence projects
- List of free and open-source software packages for artificial intelligence
- Common Crawl – nonprofit that crawls the web and freely provides its archives and datasets to the public under an MIT License
- Google Colab – an O-IDE Jupyter notebook environment with free access to GPUs and TPUs for machine learning and deep learning development
- Applications of artificial intelligence

References

1. https://github.com/yoheinakajima/babyagi
2. https://github.com/crewAIInc/crewAI
3. https://github.com/FoundationAgents/MetaGPT
4. https://github.com/TransformerOptimus/SuperAGI
5. Costa, Carlos J.; Aparicio, Manuela; Aparicio, Sofia; Aparicio, Joao Tiago (January 2024). "The Democratization of Artificial Intelligence: Theoretical Framework" (https://doi.org/10.3390%2Fapp14188236). *Applied Sciences*. **14** (18): 8236. doi:10.3390/app14188236 (https://doi.org/10.3390%2Fapp14188236). hdl:10362/173131 (https://hdl.handle.net/10362%2F173131). ISSN 2076-3417 (https://search.worldcat.org/issn/2076-3417).

6. Allen, Matthew (2025-09-02). "Switzerland launches transparent ChatGPT alternative" (https://www.swissinfo.ch/eng/swiss-ai/switzerland-launches-transparent-chatgpt-alternative/89929269). *SWI swissinfo.ch*. Retrieved 2026-01-21. "Apertus (from the Latin word meaning "open") leaves nothing to the imagination in this respect. It promises that every nut and bolt is open for public scrutiny along with its design manual and recipe formula."
7. model weights only
8. "google/gemma-4-31B-it · Hugging Face" (https://huggingface.co/google/gemma-4-31B-it). *huggingface.co*. 2026-04-02. Retrieved 2026-04-07.
9. Heath, Alex (2025-08-05). "OpenAI releases a free GPT model that can run on your laptop" (https://www.theverge.com/openai/718785/openai-gpt-oss-open-model-release). *The Verge*. Retrieved 2026-03-07.
10. Lagos, Anna (September 1, 2025). "Latam-GPT: The Free, Open Source, and Collaborative AI of Latin America" (https://www.wired.com/story/latam-gpt-the-free-open-source-and-collaborative-ai-of-latin-america/). *Wired*. ISSN 1059-1028 (https://search.worldcat.org/issn/1059-1028). Retrieved 2025-10-08.
11. Osborn, Catherine (2025-12-22). "Where Does Latin America Stand in the Global AI Race?" (https://foreignpolicy.com/2025/06/13/latin-america-ai-latam-gpt-chile-cenia/). *Foreign Policy (magazine)*. Retrieved 2025-12-05.
12. "Models Overview | Mistral AI Large Language Models" (https://web.archive.org/web/20250409095851/https://docs.mistral.ai/getting-started/models/models_overview/). *docs.mistral.ai*. Archived from the original (https://docs.mistral.ai/getting-started/models/models_overview/) on 2025-04-09. Retrieved 2026-03-07.
13. Mo, Liam; Hall, Casey (19 September 2024). "Alibaba accelerates AI push by releasing new open-source models, text-to-video" (https://www.reuters.com/technology/alibaba-accelerates-ai-push-by-releasing-new-open-source-models-text-to-video-2024-09-19/). *Reuters*.
14. Wiggers, Kyle (28 February 2024). "StarCoder 2 is a code-generating AI that runs on most GPUs" (https://techcrunch.com/2024/02/28/starcoder-2-is-a-code-generating-ai-that-runs-on-most-gpus/). *TechCrunch*. Retrieved 12 March 2026.
15. "New VS Code Tool: StarCoderEx (AI Code Generator) -" (https://visualstudiomagazine.com/articles/2023/05/08/starcoder.aspx). *Visual Studio Magazine*. Retrieved 12 March 2026.
16. Wiggers, Kyle (4 May 2023). "Hugging Face and ServiceNow release a free code-generating model" (https://techcrunch.com/2023/05/04/hugging-face-and-servicenow-release-a-free-code-generating-model/). *TechCrunch*. Retrieved 12 March 2026.
17. "FAIRSEQ: A Fast, Extensible Toolkit for Sequence Modeling" (https://research.facebook.com/publications/fairseq-a-fast-extensible-toolkit-for-sequence-modeling/). *research.facebook.com*. 2019-06-03.
18. "OpenNMT" (https://opennmt.net/). *opennmt.net*.

External links

- opensource.org/ai (https://opensource.org/ai) – Open Source Initiative
- Data and AI White paper (https://theodi.org/insights/reports/building-a-better-future-with-data-and-ai-a-white-paper/) (July 24, 2024) – Open Data Institute

Retrieved from "https://en.wikipedia.org/w/index.php?title=Lists_of_open-source_artificial_intelligence_software&oldid=1348282373"