

Machine Learning

Framework	Platform	Library	Framework	Platform	Library	Tool	Reinforcement Learning	Programming
<ul style="list-style-type: none"> Accord.NET Microsoft LightGBM MAHOUT ML.NET RAY ZenML 	<ul style="list-style-type: none"> Angel ForestFlow Alibaba Alink Apache SystemML Ax cortex H2O Kubeflow MEAPFLOW mlflow PredictionIO SELDON VOPAL MARKET 	<ul style="list-style-type: none"> 1ML AutoGluon CatBoost Flashlight MediaPipe mipack Levens OpenCV openim CARET Learn 將軍 Shogun Sonnet Salesforce TransmogrifAI dmk XGBoost xLearn 	<ul style="list-style-type: none"> SINGA Chainer Microsoft CNTK ay/net Alibaba euler [M]^s MindSpore mxnet ncnn 飞桨 PaddlePaddle Pythia PYTORCH TensorFlow 	<ul style="list-style-type: none"> TuV Incubating DeepDetect Determined AI jino Onepanel Polaxon Alibaba.com AI Deep Learning 	<ul style="list-style-type: none"> BigDL Catalyst DL4J fast.ai Keras PyTorch Ignite PyTorch Lightning PyTorchVideo 	<ul style="list-style-type: none"> BeyondML Sandbox BoTorch Intel Distiller ploidML PyTorch Hub PyTorch Proxies tvm 	<ul style="list-style-type: none"> Chainer RL CleanRL Coach DeepMind Lab Dopamine Horizon OpenAI Google PlaNet Google SEED RL Stable Baselines 	<ul style="list-style-type: none"> Pyro Graduated Kompute Incubating DASK Infer.NET Julia MARS Numba NumPy NYOKA primegrate PyMC3 python R SciPy SHIP Stan

Data


Education	Lineage	Relational DB	Store & Format	Versioning	Operations	Feature Engineering	Stream Processing	SQL Engine	Visualization	Pipeline Management	Labeling & Annotation	Governance
<ul style="list-style-type: none"> DATA PRACTICES.ORG Incubating OpenDS4All Incubating 	<ul style="list-style-type: none"> OpenBytes Sandbox Open Dataology Sandbox OpenLineage Sandbox 	<ul style="list-style-type: none"> CouchDB MySQL KV 	<ul style="list-style-type: none"> Milvus Graduated JanusGraph Incubating docarray Sandbox ALLUXIO ICEBERG ORC ARESDB ARROW AVRO CEPH DELTA LAKE DRUID HUDI HugeGraph INFLUXDB PANDAS PARQUET PILOSA VEARCH VESPA VINEYARD 	<ul style="list-style-type: none"> datascience dashboard DVC OULIT 	<ul style="list-style-type: none"> Amundsen Incubating datashim Incubating MARQUEZ Incubating HIVE Data Hub snortel WHYLABS whylogs 	<ul style="list-style-type: none"> FEAST Incubating feathr Sandbox Featuretools OpenML3 tsfresh 	<ul style="list-style-type: none"> NNStreamer Incubating Flink fluentd Kafka logstash Pravega PREFECT PULSAR samza Uber uReplicator 	<ul style="list-style-type: none"> APACHE DRILL HAWQ SQLFlow trino presto Google Facets Prometheus NYU scion bakeh plotly Dash Uber deck.gl Ecco Google Grafana RCloud re dash Superset Google TensorBoard 	<ul style="list-style-type: none"> Artigraph Sandbox Analytics Zoo DAGSTER PIFlow TEKTON TPOT 	<ul style="list-style-type: none"> CVAT Doccano Labelbox LabelImg HITACHI Inspire the Next Microsoft VOT 	<ul style="list-style-type: none"> EGERIA Graduated IBM License Agreement 	

Model

Inference	Federated Learning	Training	Parameter	Format & Interface	Marketplace	Workflow	Benchmarking	Tool	Explainability	Adversarial	Bias & Fairness
<ul style="list-style-type: none"> ADLIK Incubating KServe Incubating CloudfML MNN NVIDIA TensorRT NVIDIA TensorRT Inference Server uTensor 	<ul style="list-style-type: none"> FATE Incubating SUBSTRA Incubating OpenFL PySyft TensorFlow Federated 	<ul style="list-style-type: none"> KOROVIO Graduated LEWIG Incubating Microsoft Federated Learning Library Petastorm TorchRec 	<ul style="list-style-type: none"> HYPERSCRIPT Katib talos Uber NeuroPod 	<ul style="list-style-type: none"> ONNX Graduated 	<ul style="list-style-type: none"> Machine Learning exchange Sandbox Acumos Archived IBM 	<ul style="list-style-type: none"> Flyte Graduated Kedro Incubating airflow nifi argo Azaban BENTONML Cadence Couler CYCLONE DataBolt dflow kestra Spotify luigi mleap Orchest PREFECT TRAINS solomo 	<ul style="list-style-type: none"> DAWN Bench MLPerf 	<ul style="list-style-type: none"> FlagAI 迅雷 Sandbox Qualcomm AIMET FACEBOOK dlm FLAML Microsoft MMON aws MMS MB amazon Neo-AI NETRON ONNX RUNTIME PipelineAI studio.ml Google TensorFlow Model Analysis aws TorchServe turi 	<ul style="list-style-type: none"> AI Explainability 360 Incubating Microsoft InterpretML UNIVERSITY OF WASHINGTON Lime Google Lucid SHAP SKATER TreeInterpreter ALIBI ELIS 	<ul style="list-style-type: none"> Adversarial Robustness Toolbox Graduated AdvBox adver torch cleverhans UNIVERSITY OF TORONTO Footbox 	<ul style="list-style-type: none"> AI Fairness 360 Incubating Aequitas Audit AI Fairlearn

Distributed Computing

Computing & Management	Interface	Security & Privacy	Natural Language Processing	Notebook Environment
<ul style="list-style-type: none"> EDL Elastic Deep Learning Incubating SOAJS Incubating Apache Bahir MESOS Apache Ranger SPARK STORM GNSS NETFLIX genie GraphScope kubernetes Intel Nuta OPENSIFT Singularity 	<ul style="list-style-type: none"> sparklyr Incubating APACHE TOREE LOVY 	<ul style="list-style-type: none"> Google Differential Privacy HElib Microsoft SEAL Google TensorFlow Privacy TF Encrypted 	<ul style="list-style-type: none"> DELTA Incubating RosaeNLG Sandbox Google ALBERT AllenNLP CoreNLP fastText flair LUON Kashgari FACEBOOK LASER spaCy FACEBOOK PyText RASA spaCy FACEBOOK XLM Transformers YoutokenToMe 	<ul style="list-style-type: none"> Elyra Sandbox colab IP[y]: IPython jupyter IBM Polynote Stencila Streamlit BeakerX colab IP[y]: IPython marathon



The LF AI & Data landscape explores open source projects in Artificial Intelligence and Data and their respective domains.

lfaidata.foundation

LF AI & DATA Landscape

LF AI & DATA