

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 YOOPAI MARKET 	<ul style="list-style-type: none"> 1ML AutoGluon CatBoost Flashlight MediaPipe mipack Levens OpenCV openim CARET Learn 將軍 Shogun Sonnet Salesforce TransmogriAI dmk XGBoost xLearn 	<ul style="list-style-type: none"> SINGA Chainer Microsoft CNTK ay/net Alibaba euler MindSpore mxnet ncnn fiji 飞龙 Pythia PYTORCH TensorFlow 	<ul style="list-style-type: none"> TuV 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 Pro 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 Kompute DASK Infer.NET Julia MARS Numba NumPy NYOKA primegrate PyMC3 python R SciPy SKIP 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 JanusGraph docarray Graduated Incubating 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 datashim Incubating Incubating MARQUEZ HIVE CKAN snortel WHYLABS whylogs 	<ul style="list-style-type: none"> FEAST feather Incubating 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 HAWO SQLFlow trino presto Google Facets Prometheus NYU scobion Superset Google TensorBoard 	<ul style="list-style-type: none"> bakeh IBM Carbon Design System plotly Dash Uber deck.gl Ecco Google Grafana Metabase RCloud re dash Google 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 SECURITY DATA 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 KServe Incubating Incubating CloudfML MNN NVIDIA TensorRT NVIDIA TensorRT Inference Server uTensor 	<ul style="list-style-type: none"> FATE SUBSTRA Incubating Incubating Intel OpenFL PySyft TensorFlow Federated 	<ul style="list-style-type: none"> KOROVOD LEWIG Graduated 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 Kedro Airflow nifi argo Azkaban 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 	<ul style="list-style-type: none"> Adversarial Robustness Toolbox Graduated AdvBox adver torch cleverhans UNIVERSITY OF TORONTO TORQUE FOOTBOX 	<ul style="list-style-type: none"> AI Fairness 360 Incubating Aequitas Audit AI Standard University DeepFP 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 Nauta 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 mozilla DeepSpeech fastText flair LUON Kashgari FACEBOOK LASER MINIEM CISCO Mindfield Intel NLP Architect NLP ParIAI FACEBOOK PyText RASA spaCy Microsoft Azure AI Services Transformers FACEBOOK XLM YouTokenToMe 	<ul style="list-style-type: none"> Elyra Sandbox colab IP[y]: IPython jupyter IBM Polynote Microsoft Stencila Streamlit



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