Linux Foundation AI & Data Landscape

1.0

See the interactive landscape at l.lfaidata.foundation

Greyed logos are not open source

Machine Learning

Framework

- Accord.NET
- Microsoft AutoGen
- Hugging Face CANOE
- Microsoft LightGBM
- MAHOUT
- ML.NET
- Open Platform for Enterprise AI
- RAY
- ZenML

Platform

- Angel — Graduated
- ForestFlow — Incubating
- Alibaba Alink
- Apache SystemML
- AX
- cortex
- H2O
- Kubeflow
- METAFLOW
- mlflow
- Prediction.io
- SELDON
- VOWPAL WABBIT

Library

- 1ML — Sandbox
- DeepCausality — Sandbox
- Recommenders — Sandbox
- SapientML — Sandbox
- AutoGluon
- CatBoost
- Flashlight
- MediaPipe
- mlpack
- scikit-learn
- OpenCV
- openml
- PyCARET
- learn
- Shogun
- Sonnet
- salesforce Transmogrif AI
- dmlc XGBoost
- xLearn

Deep Learning

Framework

- DeepRec — Sandbox
- ShaderNN — Sandbox
- SINGA
- Chainer
- Microsoft CNTK
- ayinet
- Alibaba euler
- [M]$ MindSpore
- mxnet
- ncnn
- Paddle
- Pythia
- PYTORCH
- TensorFlow

Platform

- TonY — Incubating
- DeepDetect
- Determined AI
- jina
- Onepanel
- Polyaxon
- Alibaba cube

Library

- BigDL
- Catalyst
- DL4J
- fast.ai
- Keras
- Horovod
- PyTorch Ignite
- PyTorch Lightning
- PyTorch Video

Tool

- BeyondML — Sandbox
- BoTorch
- intel Distiller
- ploidVL
- PyTorch Geometric
- tvm

Programming

- Pyro — Graduated
- Kompute — Incubating
- DASK
- Infer.NET
- julia
- MARS
- Numba
- NumPy
- ÑYOKA
- pomegranate
- PyMC3
- python
- R
- SciPy
- SKIP
- Stan

Reinforcement Learning

- Chainer RL
- CleanRL
- Coach
- DeepMind Lab
- Dopamine
- Horizon
- OpenAI
- Google PlaNet
- Google SEED RL
- Stable Baselines

Data

Education

- DATAPRACTICES.ORG — Incubating
- OpenDS4All — Incubating

Lineage

- OpenLineage — Graduated
- OpenBytes — Sandbox
- Open Datalogy — Sandbox

Relational DB

- CouchDB
- MySQL
- KV

Store & Format

- Milvus — Graduated
- docarray — Incubating
- JanusGraph — Incubating
- LakeSoul — Sandbox
- ALLUXIO
- ICEBERG
- orc
- ARESDB
- ARROW
- ORC
- ceph
- DELTA LAKE
- Dragonfly
- druid
- hudi
- HugeGraph
- influxdb
- pandas
- Parquet
- pilosa
- StarRocks
- Vald
- VEARCH
- vespa
- Vineyard

Versioning

- dotscience dotmesh
- DVC
- FastTreeML
- Quilt

Operations

- MARQUEZ — Graduated
- Amundsen — Incubating
- datashim — Incubating
- Alive
- cikan
- Data Hub
- great_expectations
- Mathesar
- snorkel
- WHYLABS whylogs

Feature Engineering

- FEAST — Incubating
- feathr — Sandbox
- Featuretools
- OpenMLDB
- tsfresh

Stream Processing

- NNStreamer — Incubating
- RocketMQ
- beam
- brooklin
- Flink
- fluentd
- kafka
- logstash
- Pravega
- PREFECT
- PULSAR
- samza
- Uber uReplicator

SQL Engine

- APACHE DRILL
- HAWQ
- presto
- SQLFlow
- trino

Visualization

- bokeh
- IBM
- DB
- plotly Dash
- Uber deck.gl
- Ecomp
- Google Facets
- Grafana
- Metabase
- PrometheusQL
- RCloud
- redash
- NYU midas
- Superset
- Google TensorBoard

Pipeline Management

- Artigraph — Sandbox
- intel Analytics Zoo
- KUBEFLOW
- DAGSTER
- PiFlow
- TEKTON
- TFOT

Labeling & Annotation

- Xtremel — Sandbox
- intel CVAT
- Doccano
- Label Studio
- Labelbox
- LabelImg
- HITACHI Inspire the Next
- Microsoft VoTT

Governance

- EGERIA — Graduated
- Bitol — Sandbox
- COMMUNITY CODE LICENSE AGREEMENT

Model

Inference

- ADLIK — Incubating
- KServe — Incubating
- CausalML
- MNN
- NVIDIA TensorRT
- NVIDIA TensorRT Inference Server
- Text Generation Inference
- uTensor
- vLLM

Federated Learning

- FATE — Incubating
- substra — Incubating
- OPENFL — Sandbox
- PySyft
- TensorFlow Federated

Training

- MOROVOD — Graduated
- LUDWIG — Incubating
- deepspeed
- Microsoft Microsoft Learning Library
- Petastorm
- TorchRec

Parameter

- HYPERCOPT
- Kotib
- talos

Format & Interface

- ONNX — Graduated
- Uber Neuropod
- Microsoft Semantic Kernel

Marketplace

- Machine Learning eXchange — Sandbox
- Acumos — Archived
- IBM

Workflow

- Flyte — Graduated
- kedro — Incubating
- argo
- Azkaban
- BENTOML
- Cadence
- Couler
- kestra
- Spotify luigi
- mleap
- Orchest
- PREFECT

Trusted & Responsible AI

Explainability

- AI Explainability 360 — Incubating
- ALIBI
- Captum
- ELI5
- Microsoft InterpretML
- Lime
- Google Lucid
- SHAP
- SKATER
- Bolt
- TreeInterpreter
- trulens

Adversarial Robustness

- Adversarial Robustness Toolbox — Graduated
- AdvBox
- advertorch
- cleverhans
- Foolbox

Bias & Fairness

- AI Fairness 360 — Incubating
- OPEN VOICE TRUSTMARK — Incubating
- Intersectional Fairness — Sandbox
- Aequitas
- Audit AI
- Fairlearn

Distributed Computing

Computing & Management

- EDL Elastic Deep Learning — Incubating
- SOAJS — Incubating
- Apache Ambari
- Bahir
- MESOS
- Apache Ranger
- Spark
- STORM
- ARMADA
- GNS Cosmic Neutrino Service
- NETFLIX genie
- GraphScope
- kubernetes
- intel Nauta
- OPENSHIFT
- Singularity

Interface

- OPEN VOICE INTEROPERABILITY — Incubating
- sparklyr — Incubating
- APACHE TOREE
- LIVY

Security & Privacy

- Google Differential Privacy
- IBM HElib
- Microsoft SEAL
- Google TensorFlow Privacy
- TFEncrypted

Natural Language Processing

- DELTA — Incubating
- RosaeNLG — Sandbox
- Google ALBERT
- AllenNLP
- Google Bert
- CoreNLP
- mozilla DeepSpeech
- fastText
- flair
- LUON
- haystack
- Kashgari
- FACEBOOK LASER
- NLP
- CISCO MindMeld
- intel NLP Architect
- PartAI
- FACEBOOK PyText
- RASA
- spaCy
- JetBrains
- Transformers
- FACEBOOK XLM
- YouTokenToMe

Notebook Environment

- Elyra — Sandbox
- Apache Zeppelin
- BeakerX
- colab
- ENVD
- IP[y]: IPython
- jupyter
- IBM
- Polyaxon
- nteractive
- Stencila
- Streamlit