Accelerated R with CUDA

State of the R Packages

CUDA enabled

Package	Last Update	Comment
torch	Active	
tensorflow	Active	Requires Python
MXNet	Active	Not on CRAN
cuda.ml	2022	Paused
rpud	2022	Not on CRAN
tfestimators	2021	Requires Python
H2O4GPU	2021	
RBERT	2020	Requires Python
RcppArrayFire	2019	
gputools	2016	Archived
rgpu	2010	Not on CRAN

State of the R Packages

Not using CUDA

Package	Last Update	Comment
DBgraph	Active	OpenMP
ssgraph	Active	OpenMP
OpenCL	2021	OpenCL
rkeops	2021	BLAS
gcbd	2016	BLAS

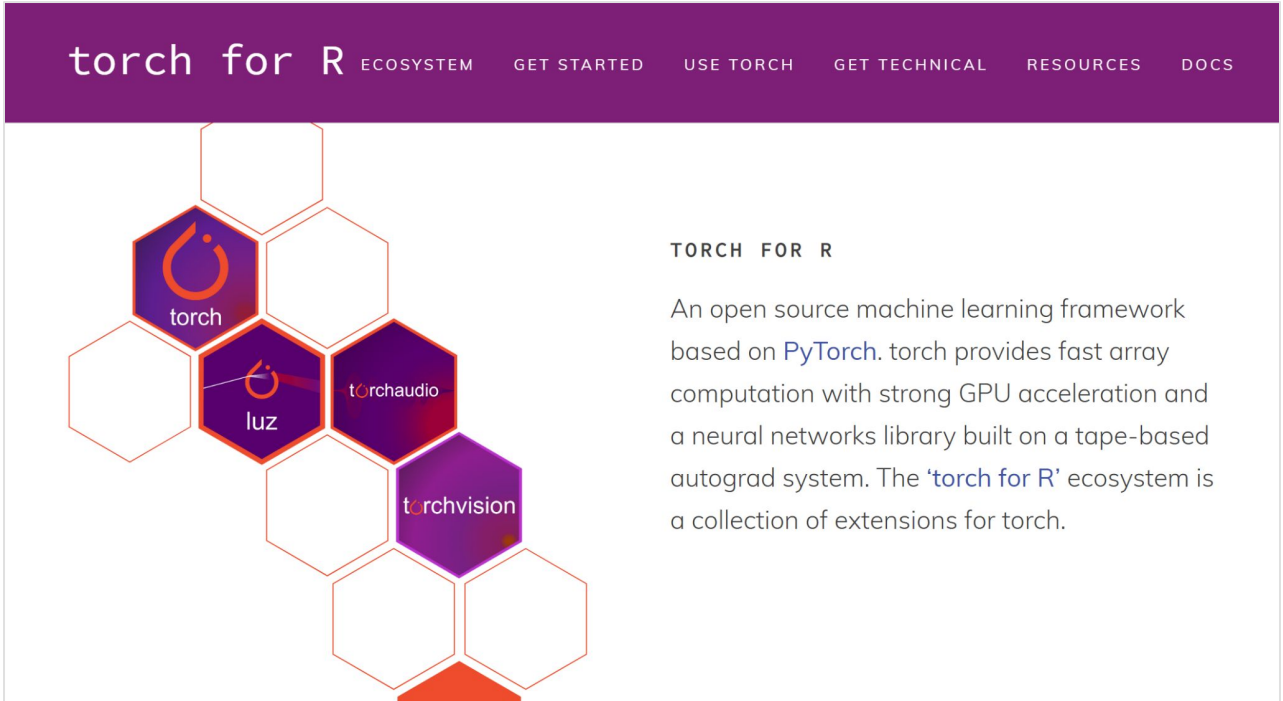
Reticulate

An R interface to Python

- Calling Python from R in a variety of ways including R Markdown, sourcing Python scripts, importing Python modules, and using Python interactively within an R session.
- Translation between R and Python objects (for example, between R and Pandas data frames, or between R matrices and NumPy arrays).
- Flexible binding to different versions of Python including virtual environments and Conda environments.

Torch for R

An R centric approach to deep learning



cuda.ml

An R centric interface into cuML (RAPIDS)

Category	Algorithm
Clustering	Density-Based Spatial Clustering (DBSCAN)
	K-Means
	Single-Linkage Agglomerative Clustering
Dimensionality Reduction	Principal Components Analysis (PCA)
	Truncated Singular Value Decomposition (tSVD)
	Uniform Manifold Approximation and Projection (UMAP)
	Random Projection
	t-Distributed Stochastic Neighbor Embedding (TSNE)
Linear Models	Linear Regression (OLS)
	Linear Regression with Lasso or Ridge Regularization
Nonlinear Models	Random Forest (RF) Classification / Regression
	Inference for decision tree-based (FIL)
	K-Nearest Neighbors (KNN) Classification / Regression
	Support Vector Machine Classifier (SVC)
	Epsilon-Support Vector Regression (SVR)