

Single Cell on Colab

Colab

- Google hosting Jupyter for free
- 12 hours for compute experiments
- Notebooks in Python and R
- 15 GB storage on Drive
- Sign-up with just an email address
- Zero install; all runs in the cloud

GPUs on Colab

Device	Speed
Google TPU	180
Nvidia T4	65
Nvidia P100	21
Nvidia P4	22



single_cell_on_colab

- Python, Apache 2.0 license
- Goal: end-to-end GPU pipelines
- All UI is Jupyter
 - Tweaked for Colab
 - Progressive Visual Analytics
- Free code & free compute

tSNE Algorithms

Year	O(time)	Name
2003	n^2	SNE
2008	n^2	tSNE
2014	$n \log n$	BH-SNE*
2018	n	tfjs-tsne
2018	$n \log n$	tsne-cuda
2019	n	nptsne

*sklearn

