## Data Science Indy: News

May 2019

## **Data Science News**

Spark Summit Highlights: Spark 3.0 is coming, Delta Lakes - Databricks solution for Data Links (Loading, Preprocessing, etc.), Koalas - Pandas in Spark Videos available at:

https://databricks.com/sparkaisummit/north-america/sessions?eventName=Summit%202019

Engineers working on Google's TensorFlow machine learning framework have revealed a subproject, MLIR, that is intended to be a common intermediate language for machine learning frameworks.

https://www.infoworld.com/article/3390659/tensorflow-unveils-mlir-for-faster-machine-learning.html

Google CoLab now comes with free T4 GPUs <a href="https://torontoai.org/2019/04/22/n-google-colab-now-comes-with-free-t4-gpus/">https://torontoai.org/2019/04/22/n-google-colab-now-comes-with-free-t4-gpus/</a>

Google has a beta of their recommendation service in the cloud <a href="https://cloud.google.com/recommendations-ai/docs/">https://cloud.google.com/recommendations-ai/docs/</a>

Microsoft (re?)launches a drag-and-drop machine learning tool (looks like existing Azure ML Studio) <a href="https://techcrunch.com/2019/05/02/microsoft-launches-a-drag-and-drop-machine-learning-tool-and-hosted-jupyter-notebooks/">https://techcrunch.com/2019/05/02/microsoft-launches-a-drag-and-drop-machine-learning-tool-and-hosted-jupyter-notebooks/</a>

## **Data Science News**

Facebook introduced PyTorch 1.1 with TensorBoard support and an upgrade to its just-in-time (JIT) compiler. <a href="https://venturebeat.com/2019/05/01/facebook-launches-pytorch-1-1-with-tensorboard-support/">https://venturebeat.com/2019/05/01/facebook-launches-pytorch-1-1-with-tensorboard-support/</a>

Facebook open-sourced: Ax, an accessible, general-purpose platform for understanding, managing, deploying, and automating adaptive experiments. BoTorch, built on PyTorch, is a flexible, modern library for Bayesian optimization, a probabilistic method for data-efficient global optimization.https://ai.facebook.com/blog/open-sourcing-ax-and-botorch-new-ai-tools-for-adaptive-experimentation/

Google open-sourced Snorkel for enabling engineers to develop and execute weak supervision strategies over millions of unlabeled examples in less than thirty minutesand which has been used to creates classifiers of comparable quality to ones trained using up to tens of thousands of hand-labeled examples.

https://ai.googleblog.com/2019/03/harnessing-organizational-knowledge-for.html

## **Data Science News**

At I/O, Google announced new capabilities for its mobile ML Kit incloding an offline On-device Translation API, the ability to track the most prominent object in a live camera feed, and AutoML Vision Edge for custom vision classification with Tensorflow Lite.

https://www.zdnet.com/article/google-expands-ml-kit-capabilities-for-building-machine-learning-into-mobile-apps/

Google is pursuing a new research approach called testing with concept activation vectors, or TCAV, which it describes as an "interpretability method" to help understand the signals neural networks use to come to their decisions. https://siliconangle.com/2019/05/07/google-combats-machine-learning-bias-open-source-tech/

Google's Al assistant will get a series of updates this year, including one that lets it book rental cars and movie tickets and will also run on-device.

https://www.staradvertiser.com/2019/05/07/breaking-news/google-promises-a-smarter-and-smaller-artificial-intelligence-assistant/

Several ML cloud offerings:

https://cloud.google.com/blog/topics/inside-google-cloud/100-plus-announcements-from-google-cloud-next19