TensorFlow & PyTorch User Group Kickoff
Thursday, June 13, 2019
Lewis Science Library 138

Sponsored by the Princeton Institute for Computational Science and Engineering (PICSciE) and co-sponsored by the Center for Statistics and Machine Learning (CSML) and OIT Research Computing

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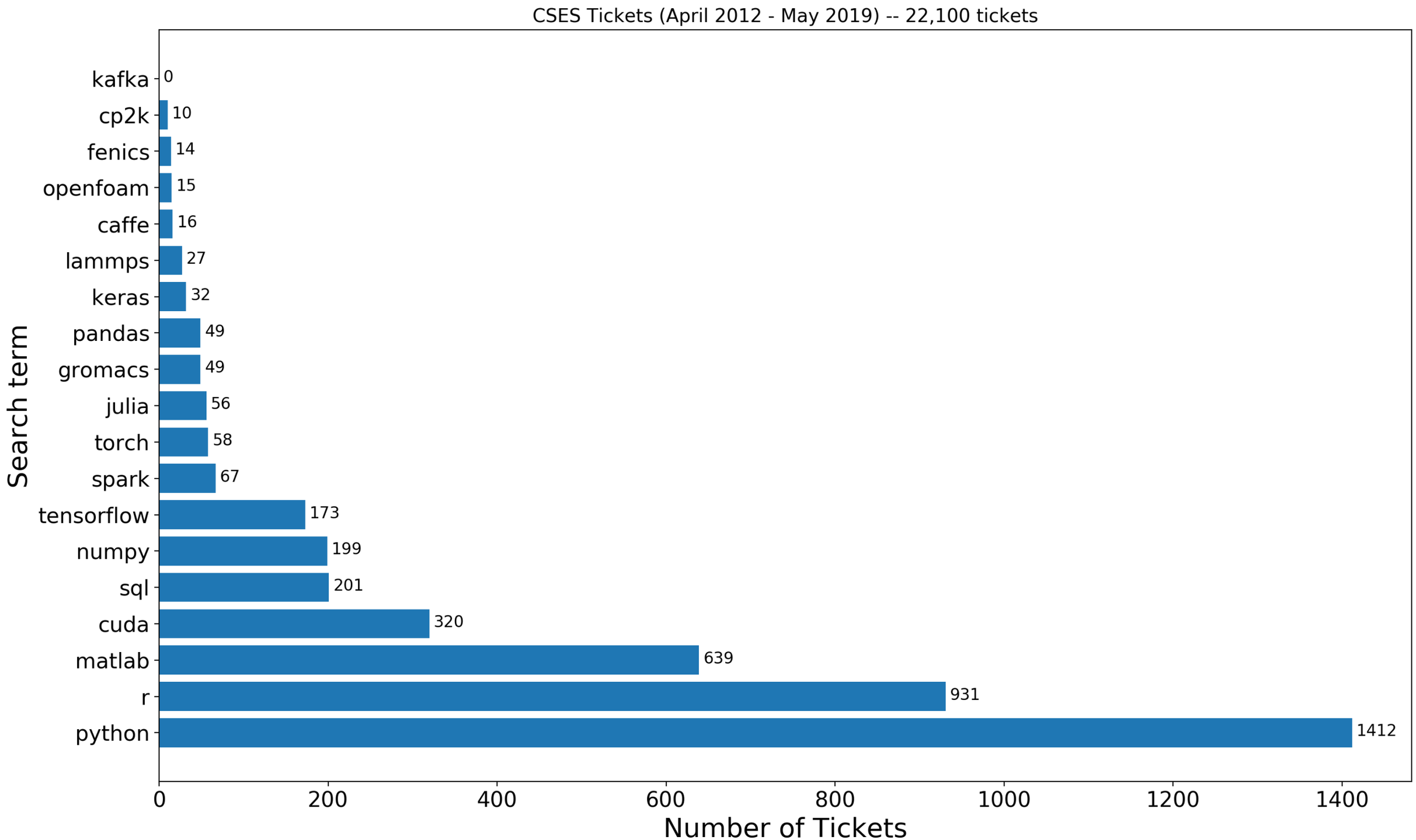
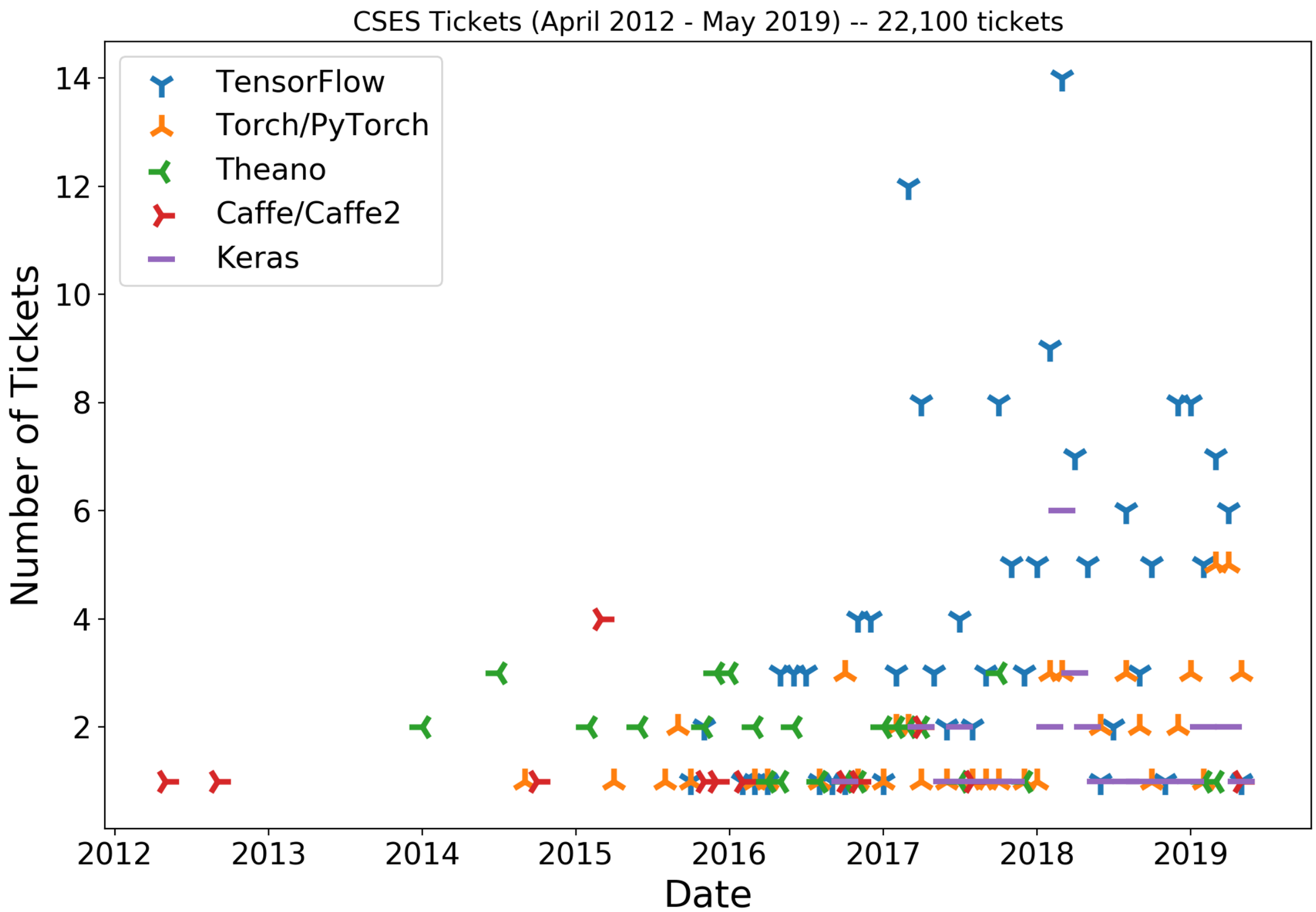


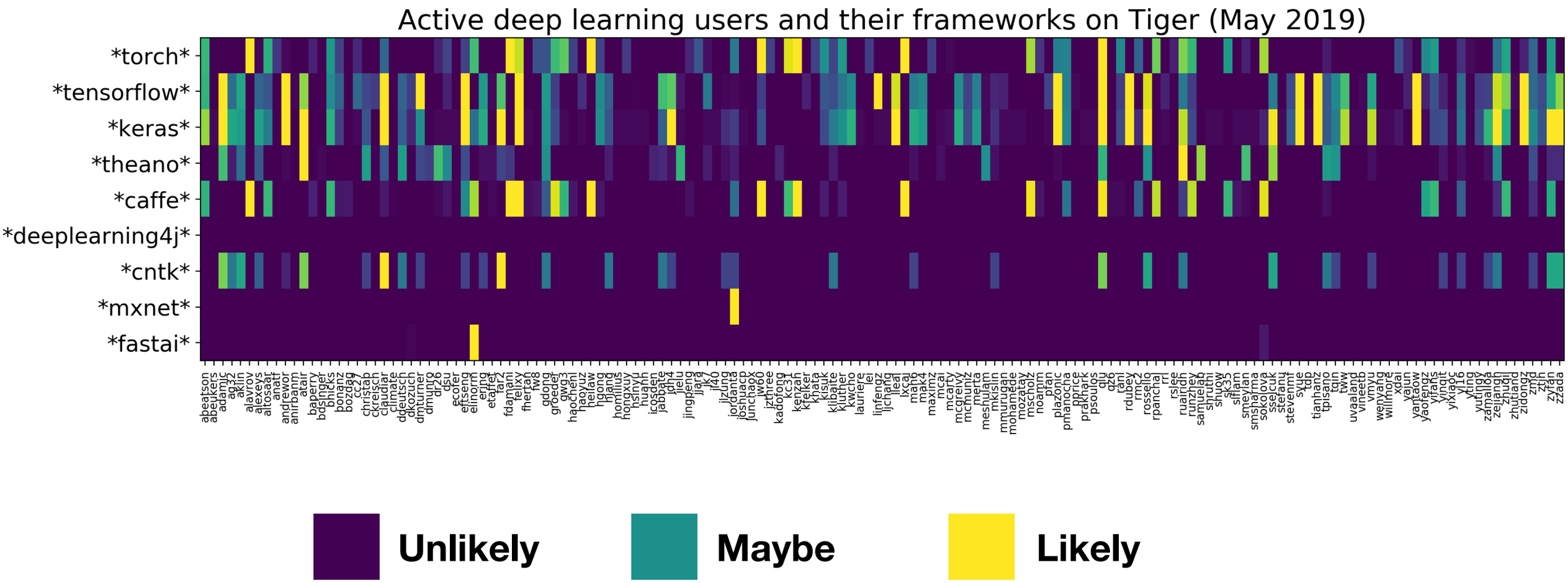

CSES Tickets (April 2012 - May 2019) -- 22,100 tickets
TensorFlow
Torch/PyTorch
Theano
Caffe/Caffe2
Keras
Number of Tickets
14
12
10
8
6
4
2
2012
2013
2014
2015
2016
2017
2018
2019
Date

Breakdown of DL frameworks on Tiger

70% TensorFlow
55% Torch/PyTorch
30% Caffe/Caffe2
21% Theano
57% Keras

Top users by group

PNI	25
CS	23
EE	11
PPPL	8
Genomics	6
Psychology	6
ORFE	5



Tutorials

Getting started with TensorFlow of the PU HPC clusters
https://github.com/PrincetonUniversity/slurm_mnist

Getting started with PyTorch of the PU HPC clusters
https://github.com/PrincetonUniversity/install_pytorch

Introduction to HPC Systems and Bash
https://princetonuniversity.github.io/hpc_beginning_workshop/

Suggested Operation of the Group

Regular meetings — 2x talks (TensorFlow, PyTorch) and technical help session (optional)

External speakers — 1 talk and pizza (3 speakers per year)

Directory of usage and interests per user
Mailing list (only select users at present)
Webpage on Research Computing

2019 Group Calendar

Thursday, June 13 at 4:30 - Kickoff meeting

Wednesday, June 26 at 5:30 - NVIDIA talk

Thursday, July 25 at 4:30 - Regular meeting (2 talks)

August - no meeting

September - External speaker

October - Regular meeting (2 talks)

November - Regular meeting (2 talks)

December - no meeting

TensorFlow & PyTorch User Group Special Meeting
Wednesday, June 26 at 5:30 pm
Lewis Science Library 120

Opportunities and challenges in self-driving cars at NVIDIA

Timur Rvachov, *NVIDIA*

There is no shortage of hype and money behind the tech industry's push for creating a self-driving car. Despite rapid progress, automation of a safety-critical consumer product still poses many unsolved problems. I will overview our team's work--which heavily employs machine learning--and discuss the benefits and challenges of such an approach in comparison to classical methods.

Timur Rvachov is a development engineer at NVIDIA's New Jersey research office. Before joining the self-driving car industry, Timur received a doctorate degree in physics from MIT. The New Jersey team focuses on a learned approach to vehicle autonomy.

Openings for the July 25 meeting

Your research + TensorFlow (20 minutes)
Your research + PyTorch (20 minutes)
Your research + some other framework (20 minutes)
Lead a discussion
Give a lightning talk

Co-Organizers Needed

If you would like to help organize the group by finding speakers and helping to solve technical issues then please email halverson@princeton.edu.

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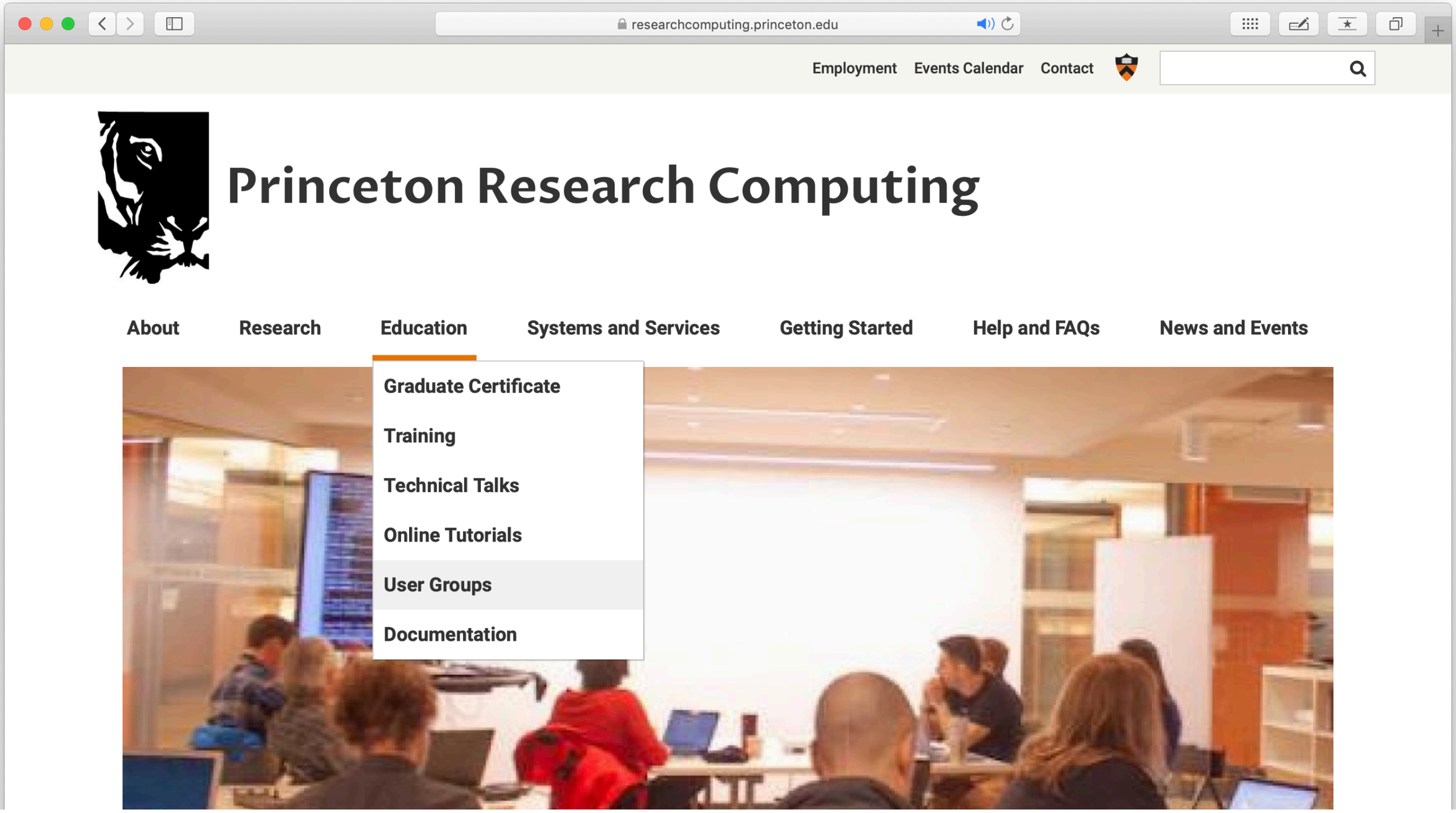
How would you like the group to operate?



https://researchcomputing.princeton.edu/TensorFlowPyTorchUserGroup