Machine Learning @ Splunk 2019

The Splunk Machine Learning Toolkit in Action

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Machine Learning PM | Splunk

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Product Manager, ML & AI, Splunk

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Product Manager, ML & AI, Splunk

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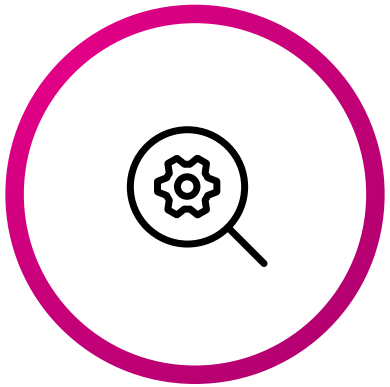
Forward-Looking Statements

During the course of this presentation, we may make forward-looking statements regarding future events or plans of the company. We caution you that such statements reflect our current expectations and estimates based on factors currently known to us and that actual events or results may differ materially. The forward-looking statements made in the this presentation are being made as of the time and date of its live presentation. If reviewed after its live presentation, it may not contain current or accurate information. We do not assume any obligation to update any forward-looking statements made herein.

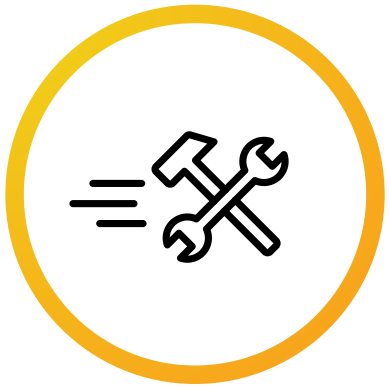
In addition, any information about our roadmap outlines our general product direction and is subject to change at any time without notice. It is for informational purposes only, and shall not be incorporated into any contract or other commitment. Splunk undertakes no obligation either to develop the features or functionalities described or to include any such feature or functionality in a future release.

Agenda

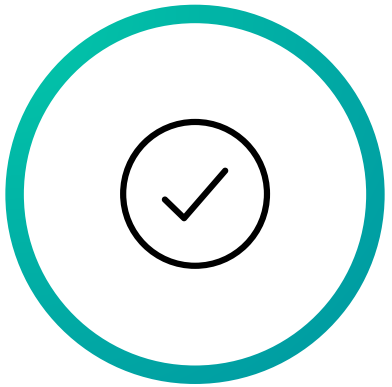


.conf Talk Analysis

ML at Splunk



MLTK in Action



What's New?

Talk Data Analysis

MLTK Impact in 2019 .conf Talks

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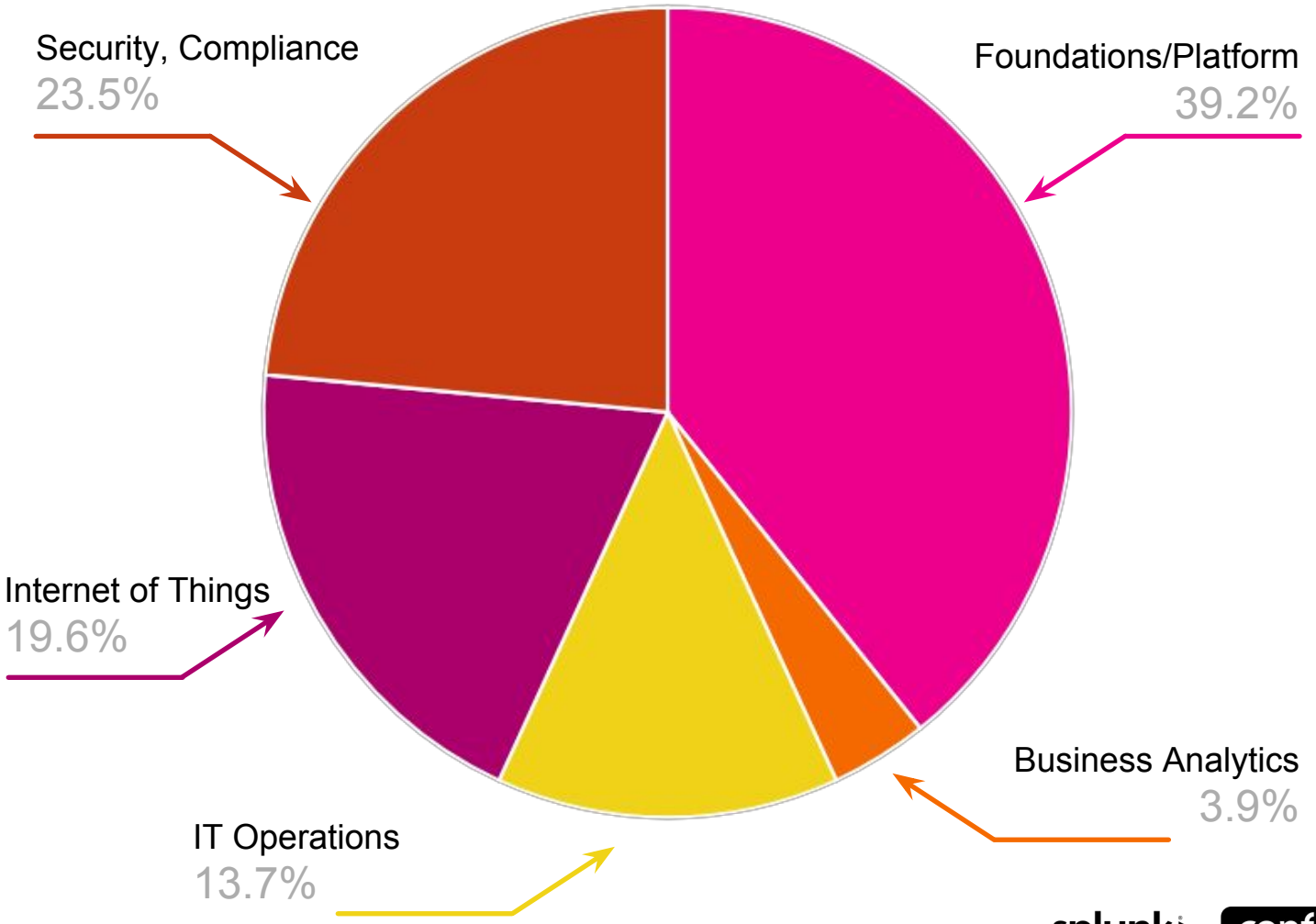
Talks per Sessions Track



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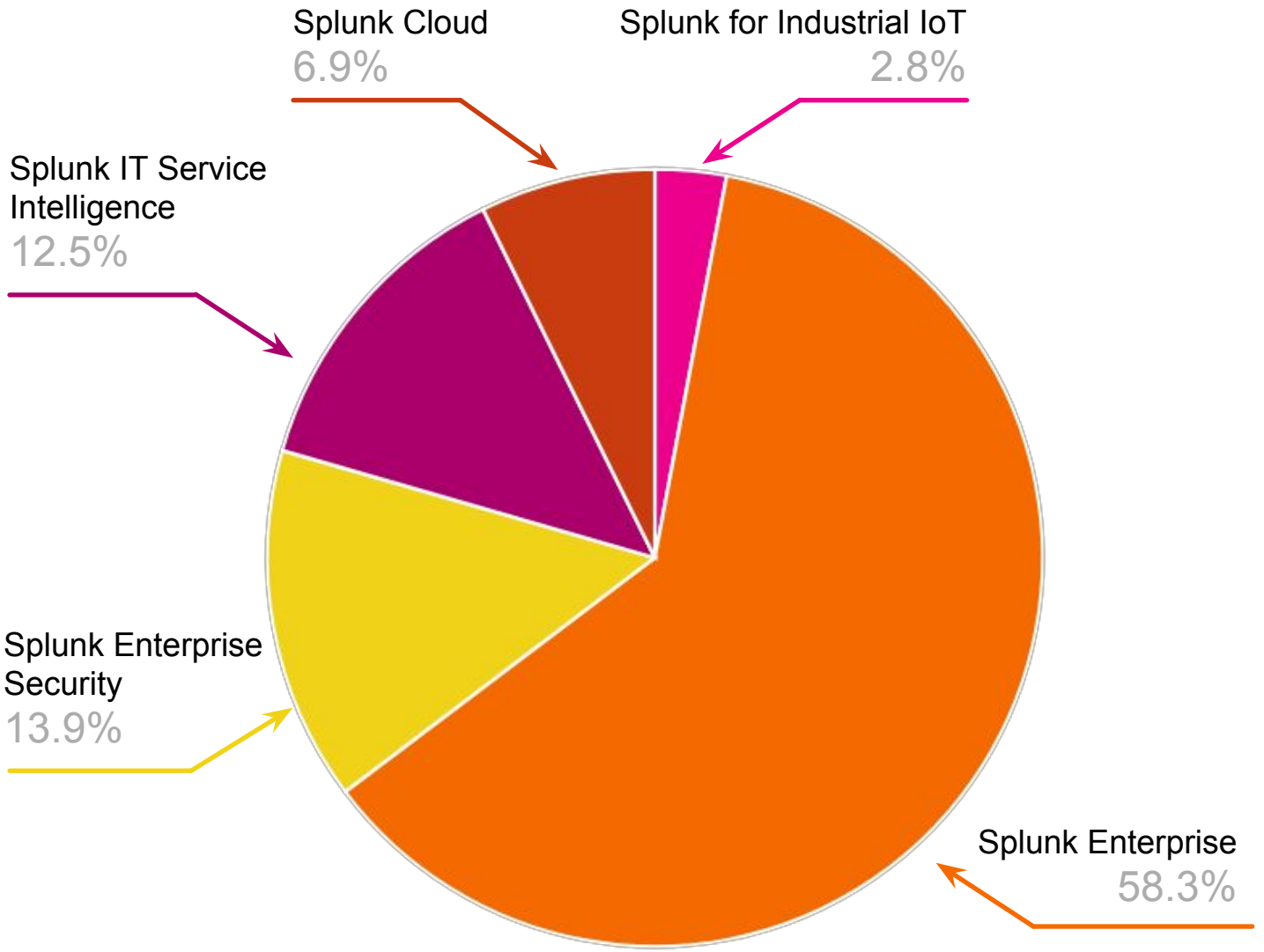
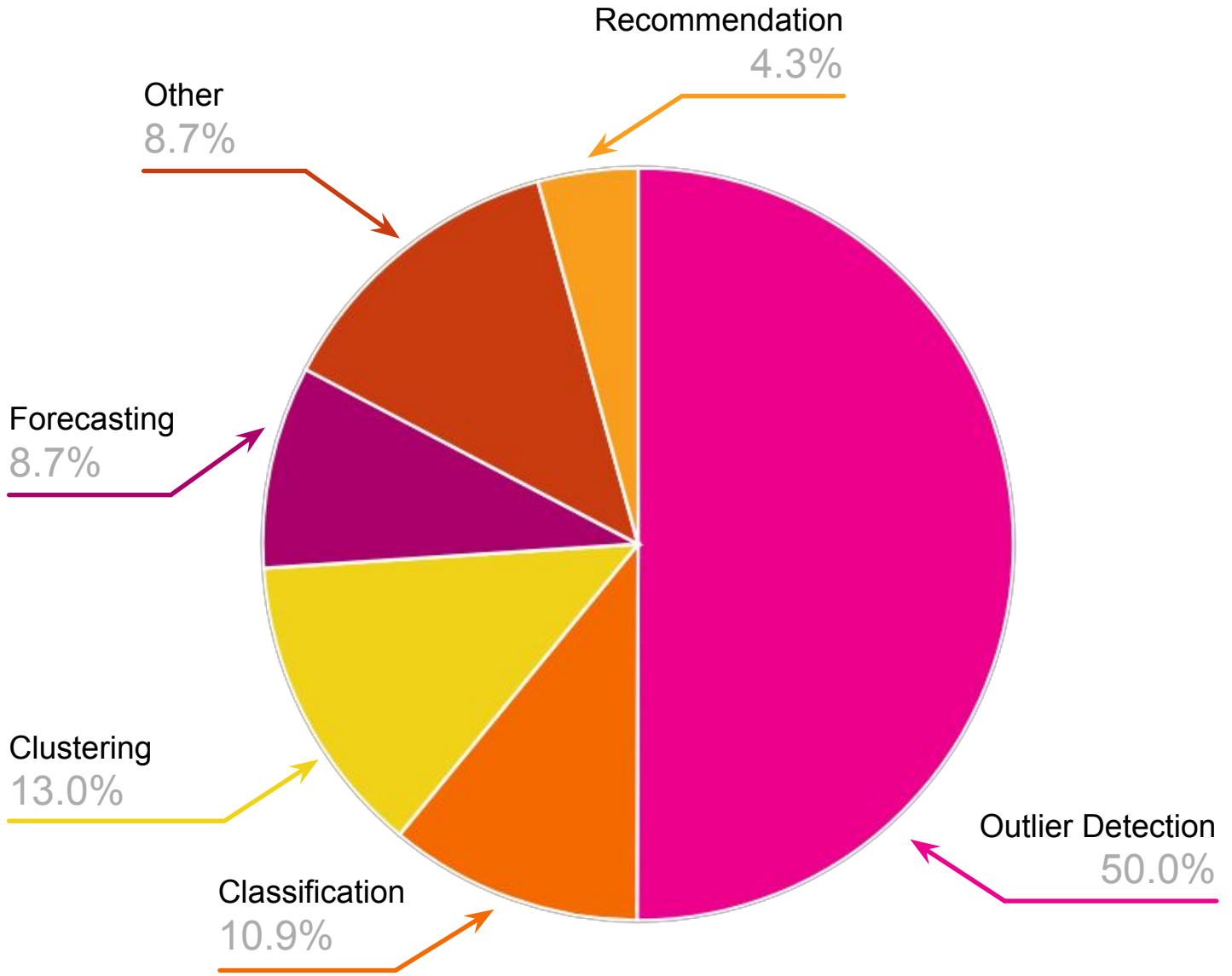
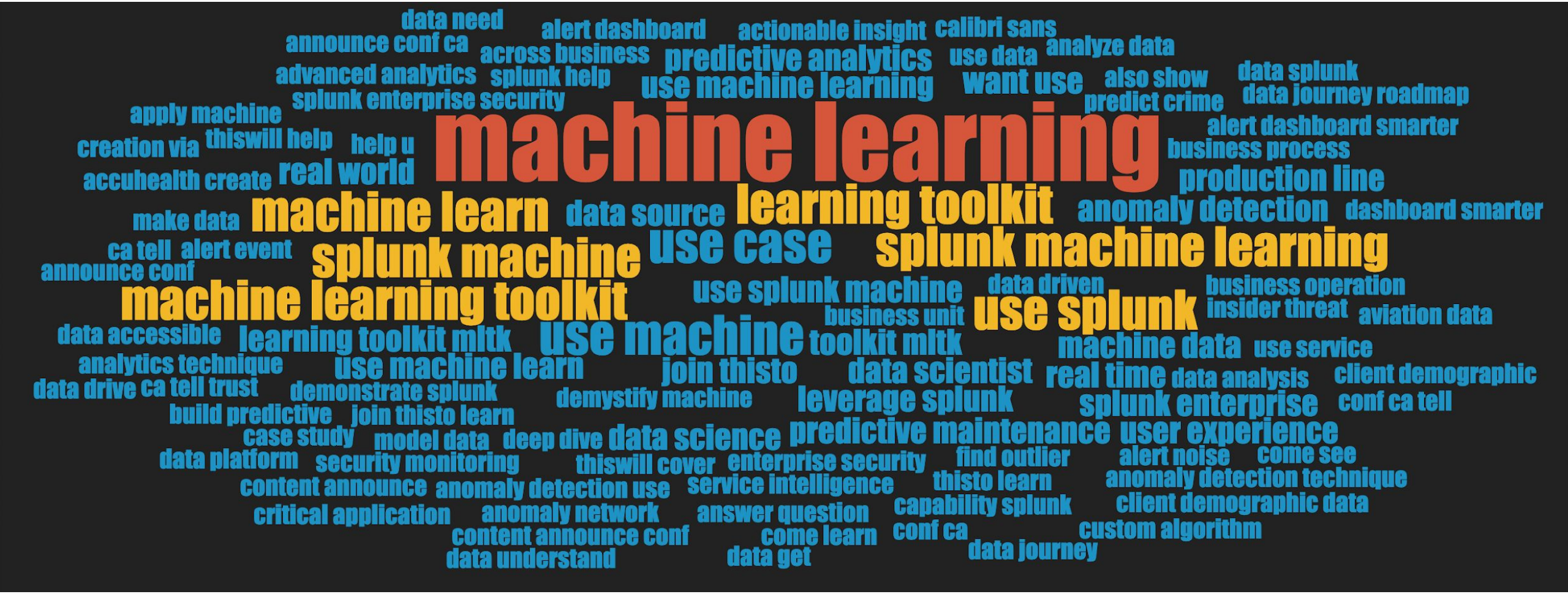
MLTK Talks Per Product Category



Talks Per ML Use Case





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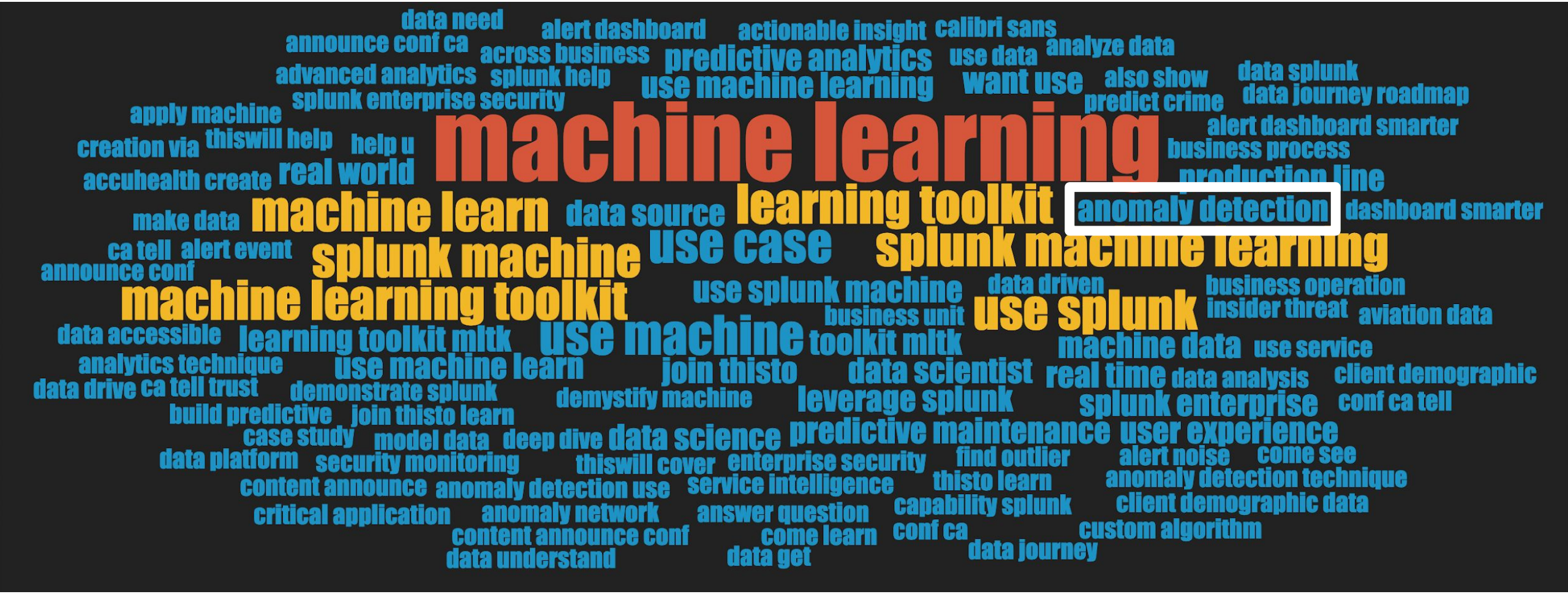

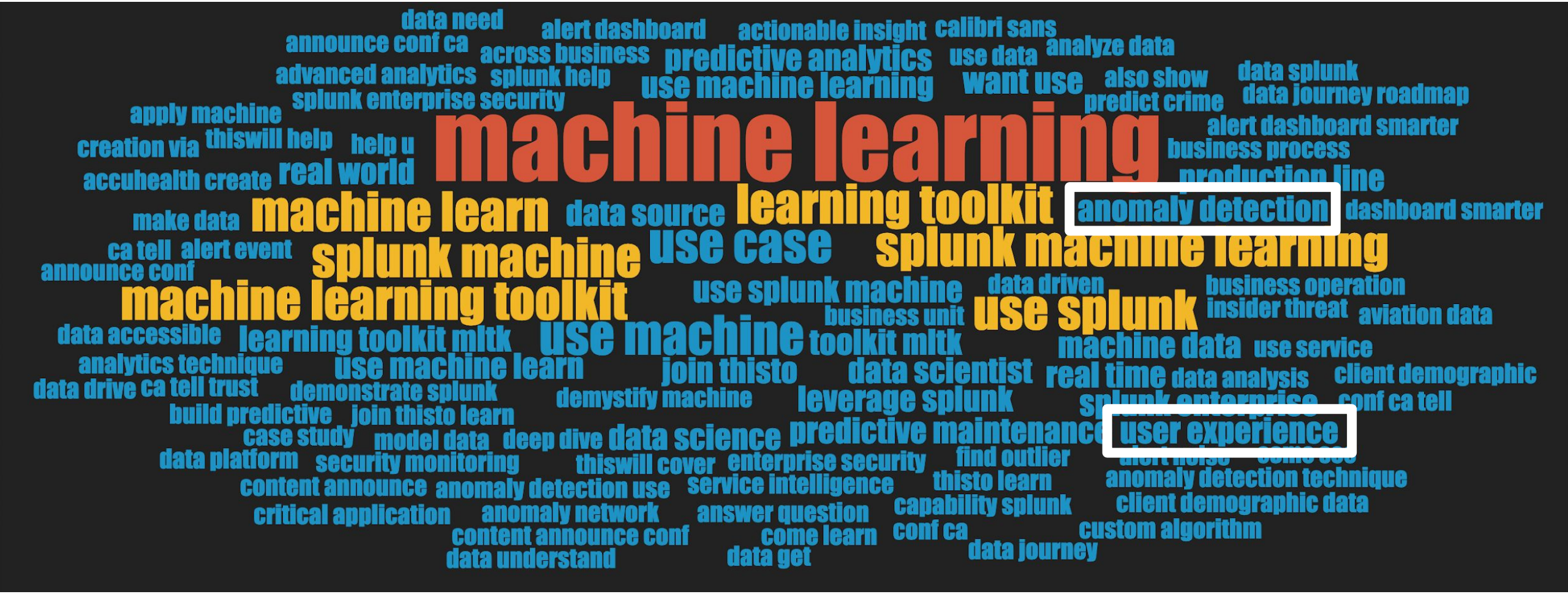

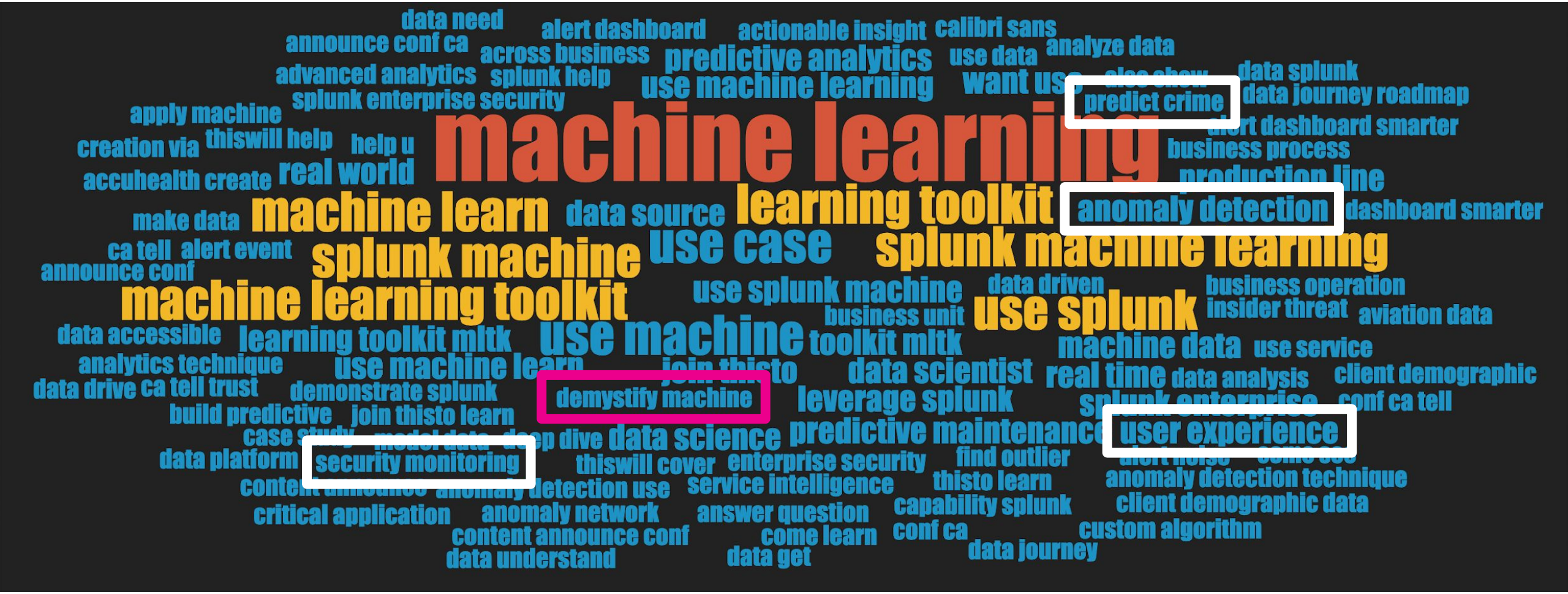

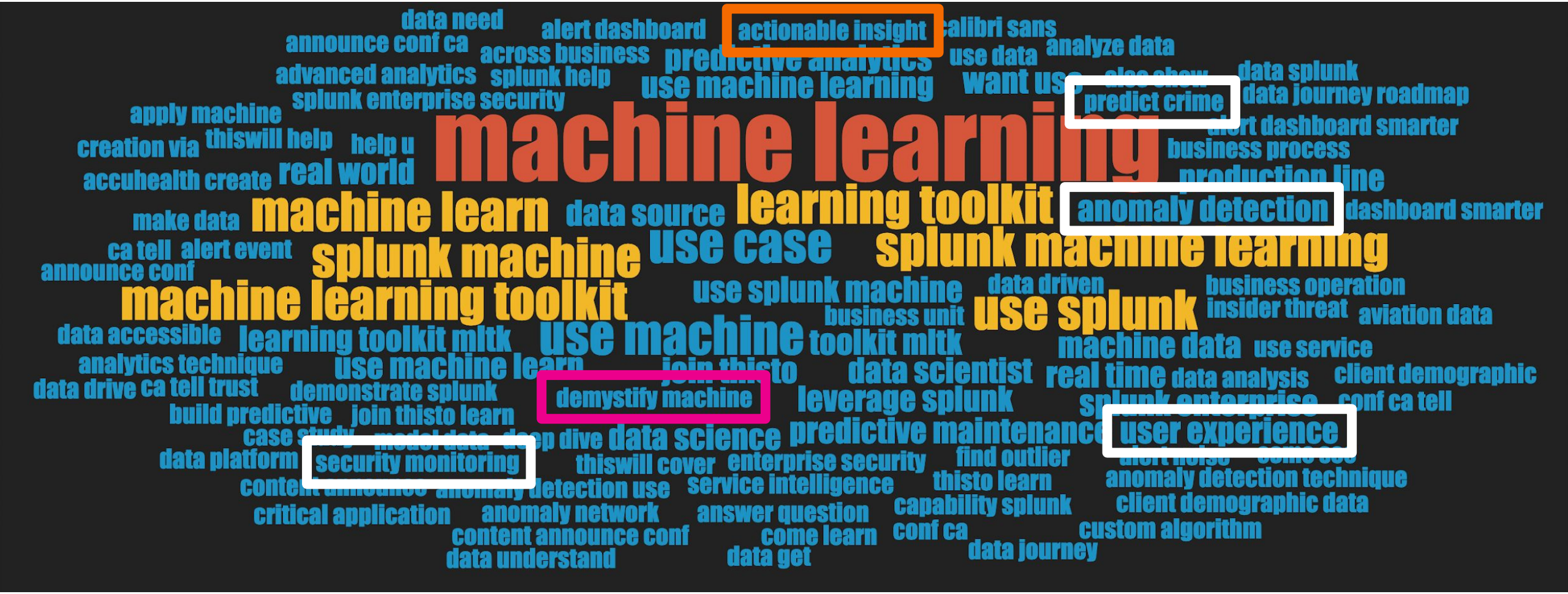

MLTK?!

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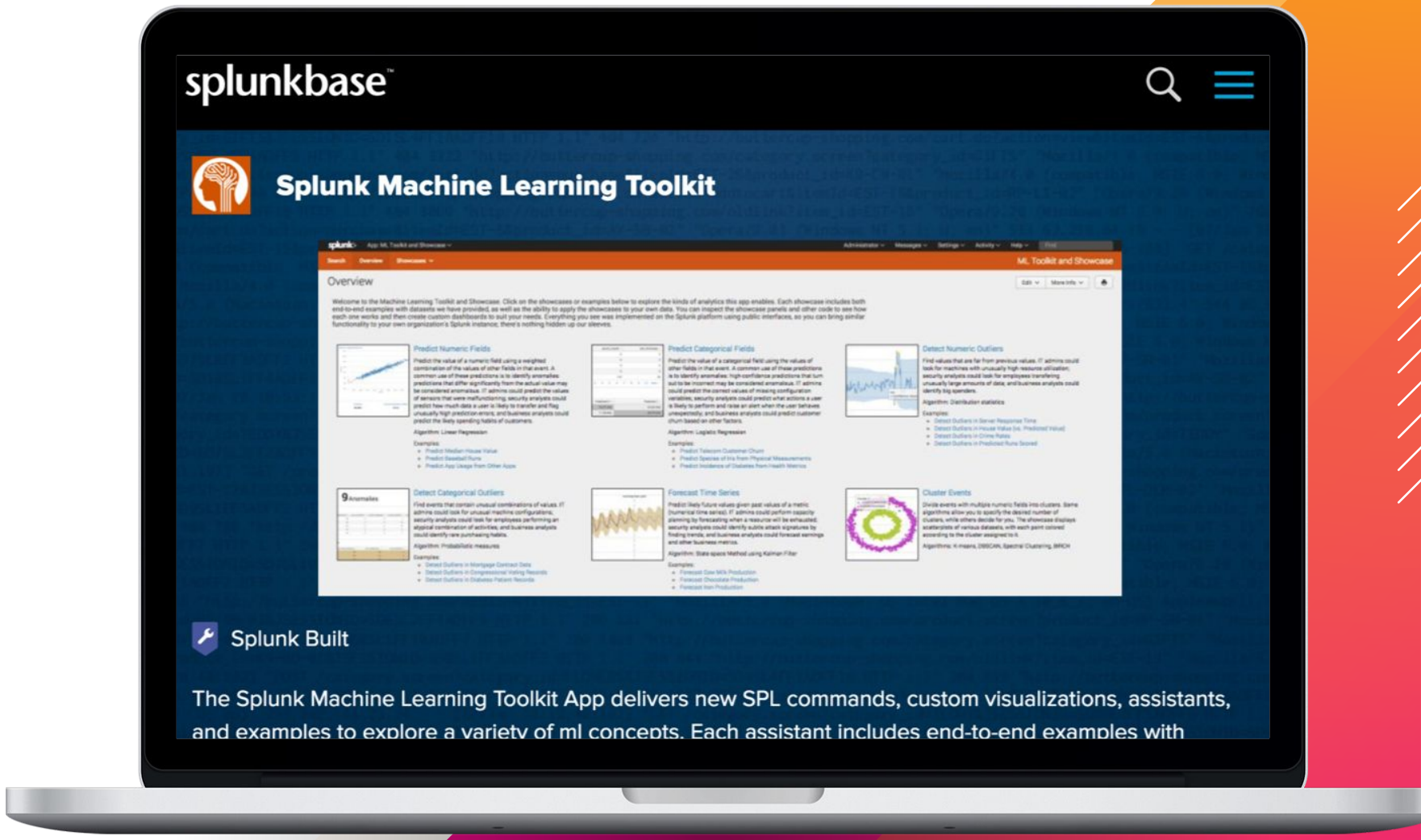
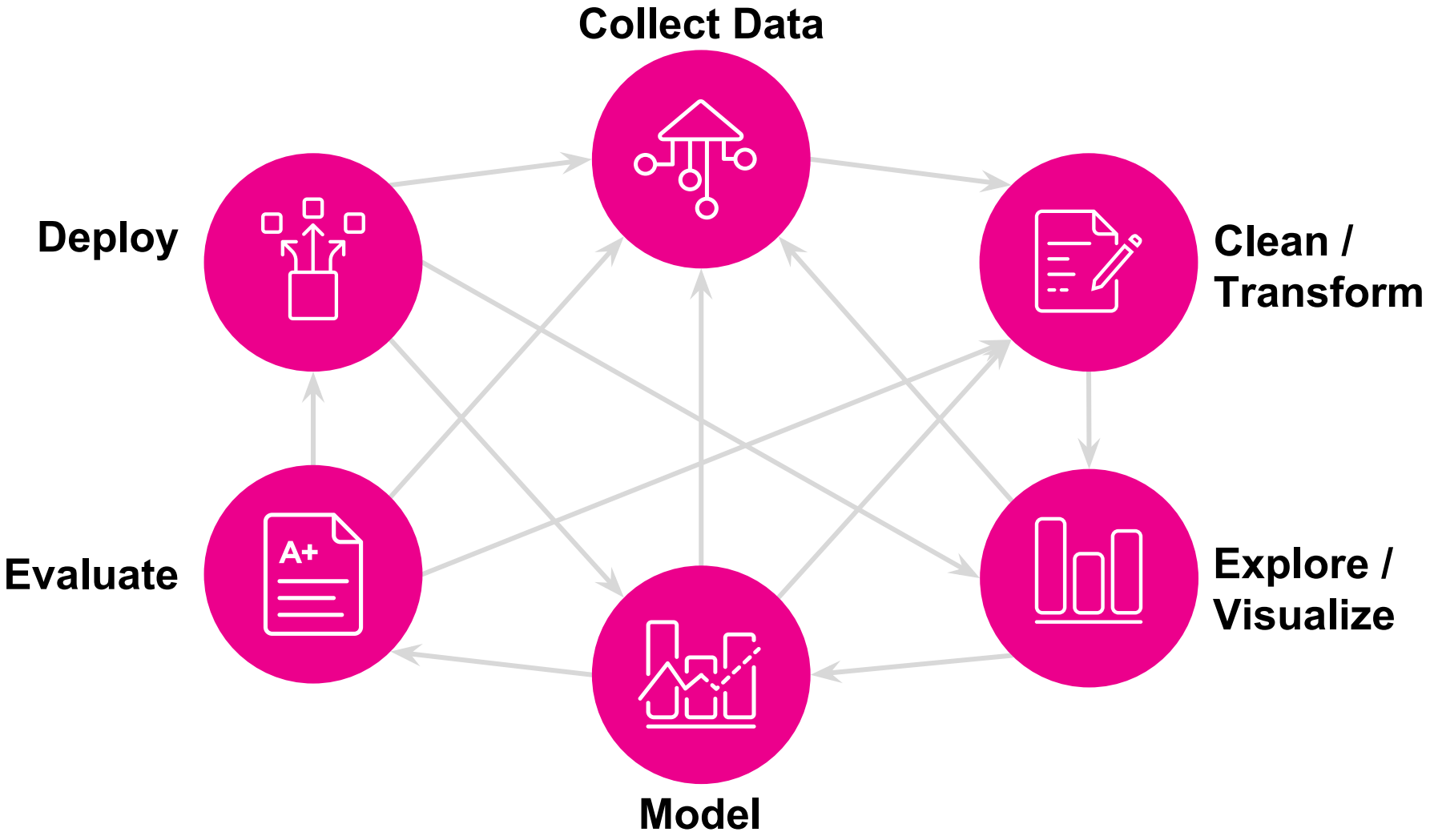
What?

Splunk has a Machine Learning Toolkit App!

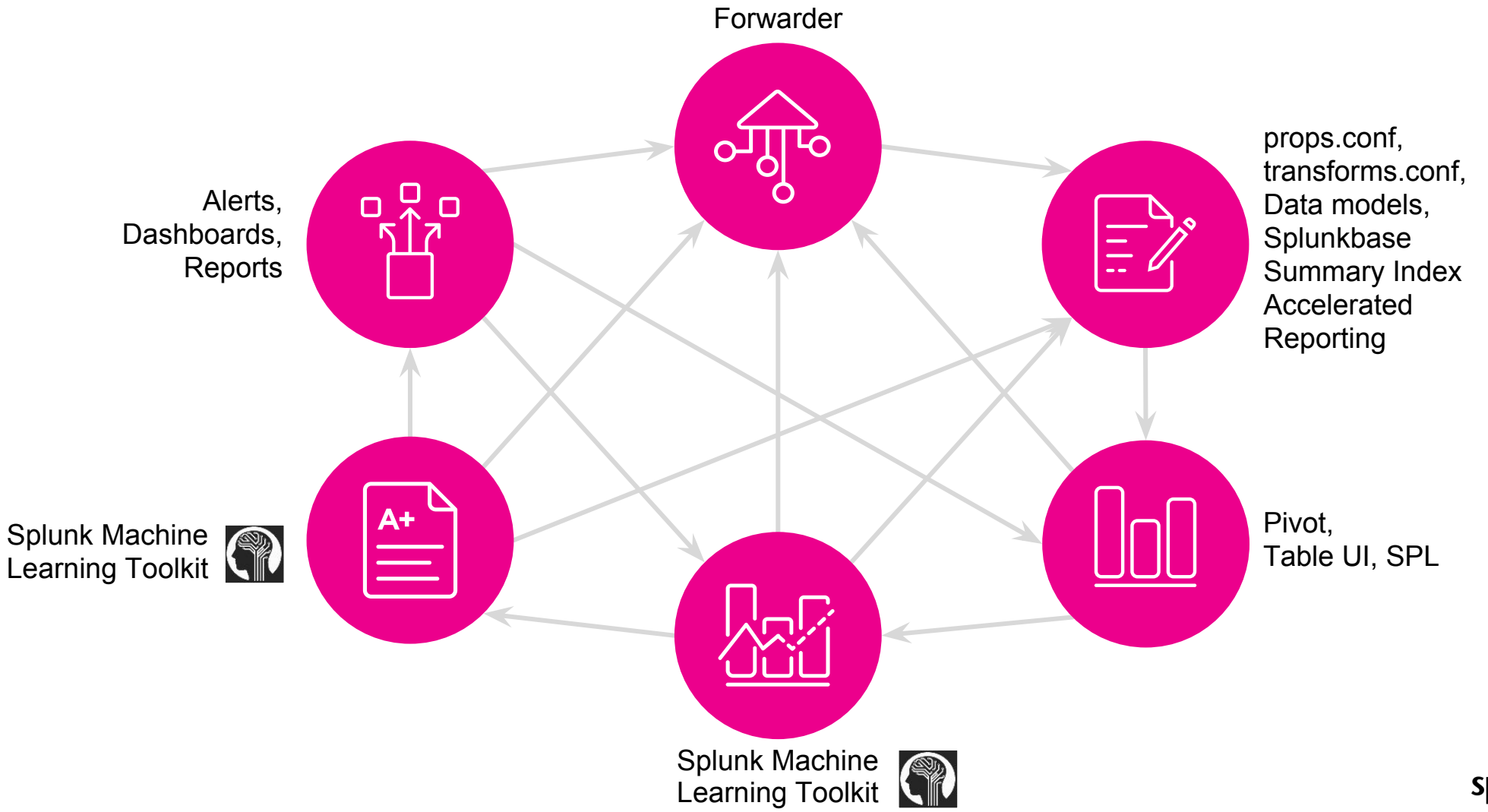
- What is Splunkbase
- What is the App
- Where can I go to learn more



Machine Learning Process

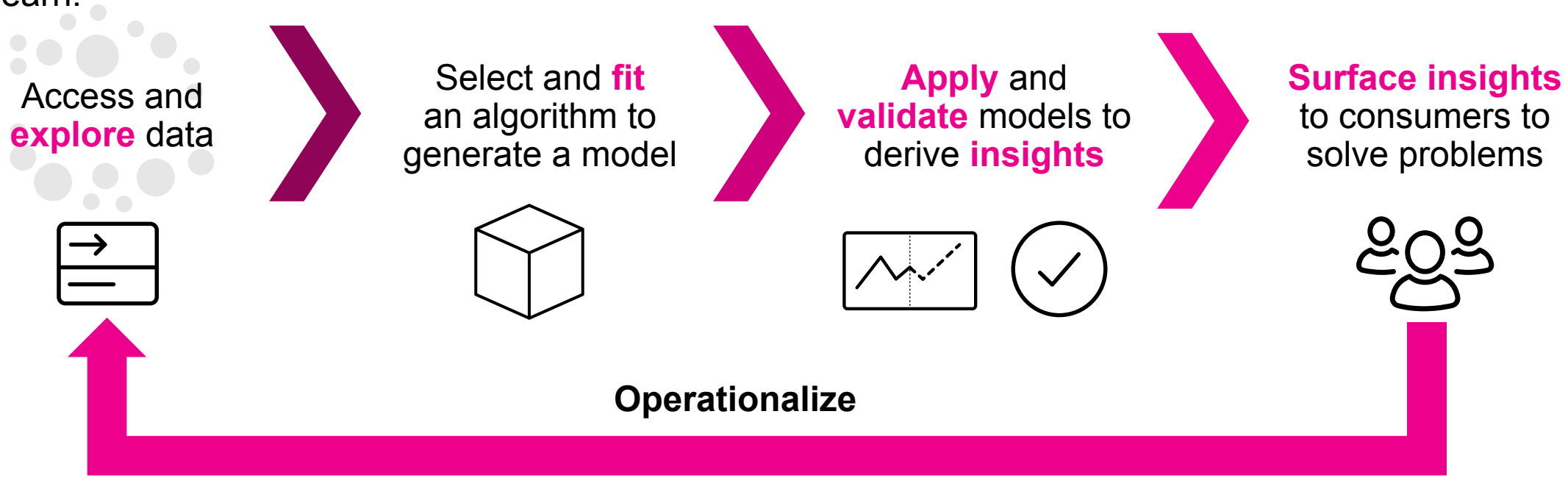


Machine Learning Process with Splunk



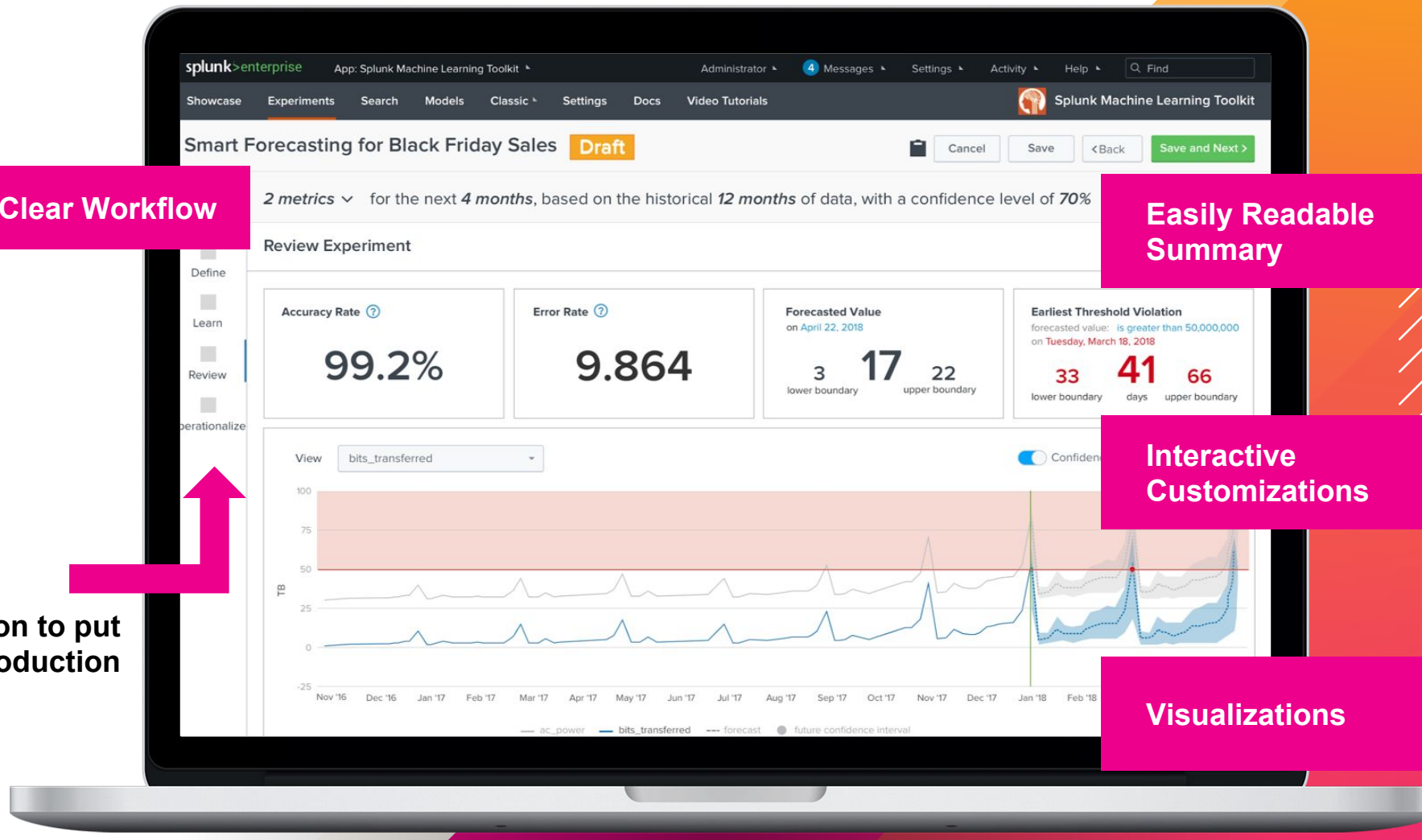
Splunk Helps Answer Questions with AI and ML

- **Identify a Problem:** <Stuff in the world> requires big time and money investment.
- **Build a Solution:** Build ML model to forecast <possible incidents>, act preemptively and continuously learn.



MLTK Delivers Easy-to-Use Outcome Assistants

Easy Automation to put ML into Production



Clear Workflow

Easily Readable Summary

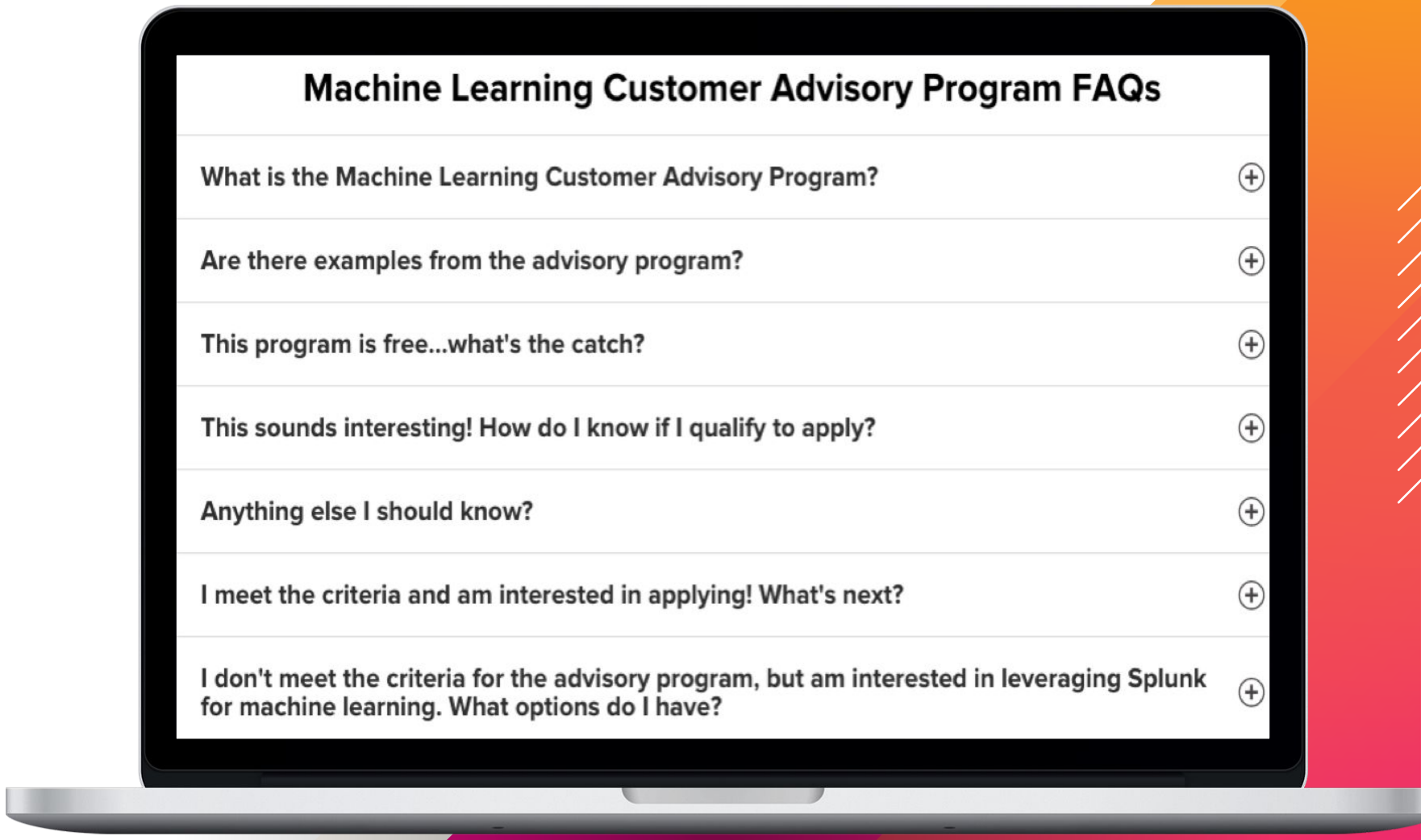
Interactive Customizations

Visualizations

What is the ML Advisory Program?

Complimentary support of Splunk data science resources to help build a ML use case resulting in a public reference

- Early access to new and enhanced Machine Learning features
- Opportunity to shape the development of the product
- Complimentary assistance in operationalizing a production quality ML model



ML Advisory Customers

T-Mobile

Siemens

Intel

StubHub

TransUnion

Ministry of Israel

Honda

BMW

MLTK in Action

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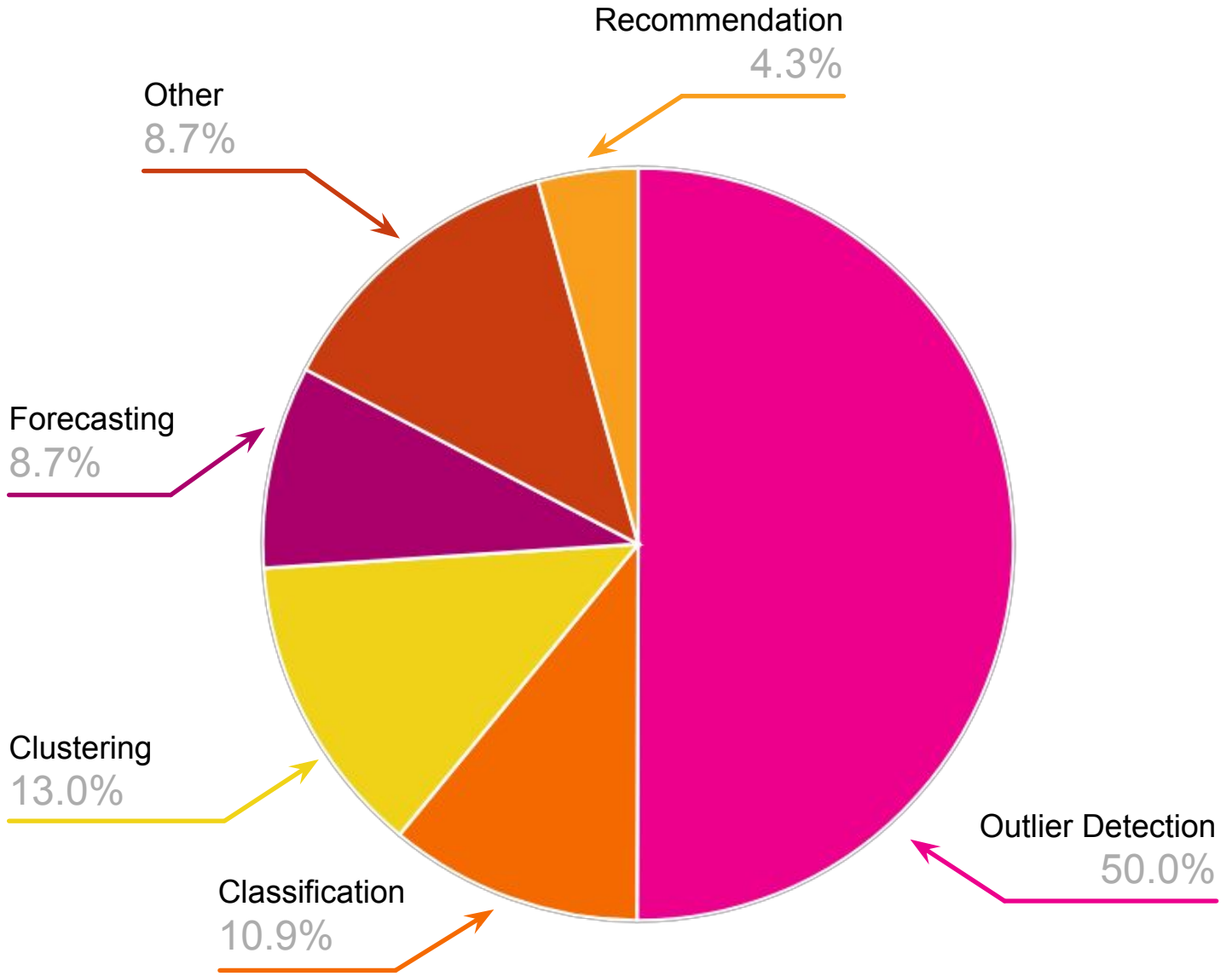
Talks Per ML Use Case



Outlier Detection

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Outlier Detection

Anomaly Detection

Threat Detection

Fraud Detection

Intrusion Detection

Threat Hunting

Outage Prediction

T-Mobile

Identifying service-impacting events across the deployed enterprise applications.

FN1366 - Enhanced Anomaly Detection: Join T-Mobile and Splunk as we Deep Dive an Enterprise-IT Operational Use Case

Wednesday, October 23, 01:45 PM - 02:30 PM

Iman Makaremi, Principal Product Manager – Machine Learning and AI, Splunk
Scott Garcia, MTS - Member Technical Staff, T-Mobile

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Stubhub

Automatic monitoring of performance KPIs and anomaly discovery within minutes.

IT1171 - Accelerate your ability to sniff out application exceptions and detect outliers in performance KPIs

Tuesday, October 22, 04:15 PM - 05:00 PM

Eurus Kim, Staff ML Architect, Splunk
PJ Pokhrel, Performance Engineer, Stubhub
Steve Veio, Performance OPS Manager, StubHub

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Aflac

Insurance Fraud Detection

SEC1904 - The Duck Test: Leverage Machine Learning to Remediate Fraud in Huge Datasets

Thursday, October 24, 01:00 PM - 01:45 PM

Matthew Harper, Director, Cyber Crime Prevention, Aflac

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Siemens

Datacenter security monitoring for hacker detection.

SEC1374 - Augment Your Security Monitoring Use Cases with Splunk's Machine Learning Toolkit

Thursday, October 24, 11:45 AM - 12:30 PM

Oliver Kollenberg, Security Consultant, Siemens AG
Philipp Drieger, Staff Machine Learning Architect , Splunk

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MLTK Offers

1

Numeric Outlier
Detection Assistant

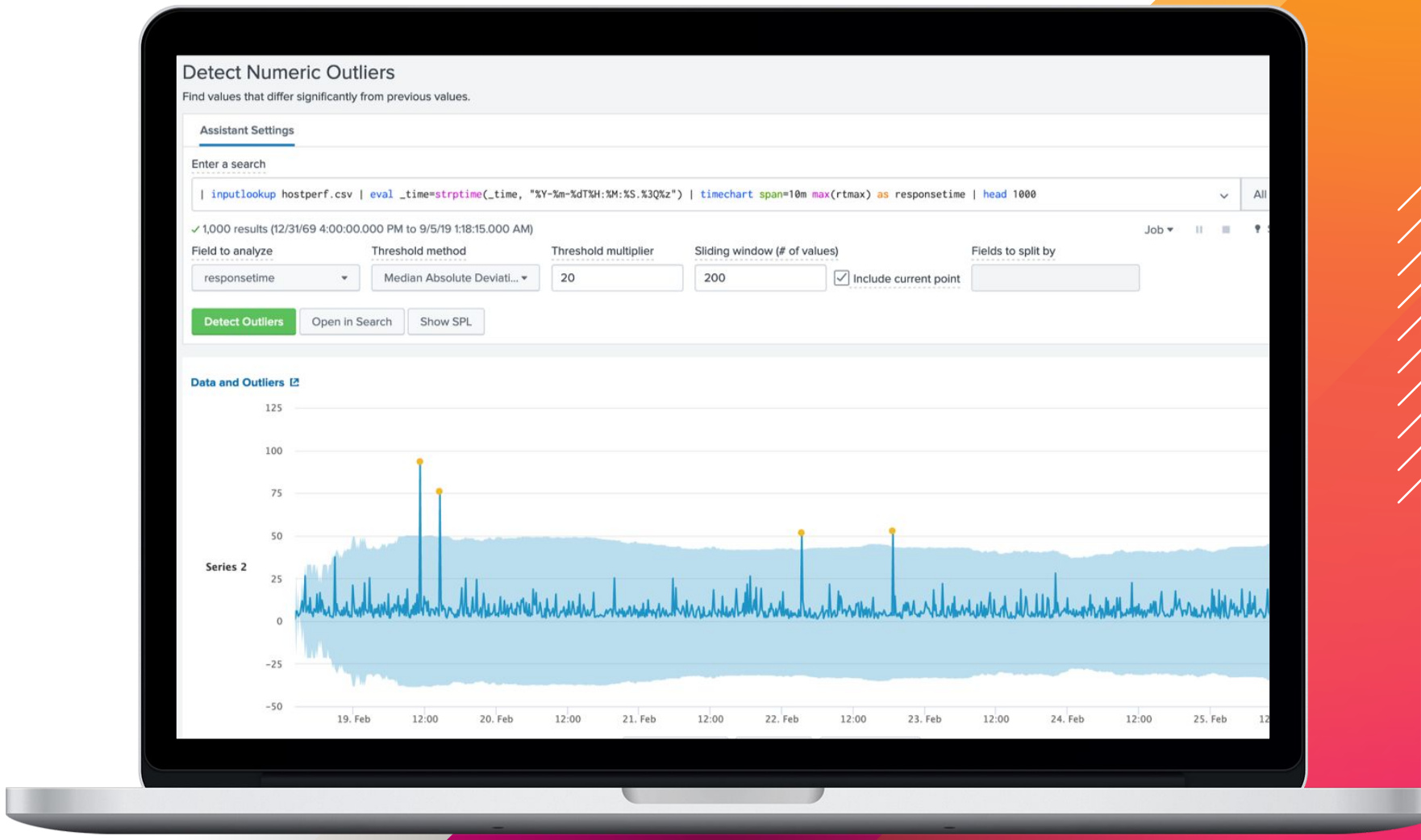
2

Smart Outlier
Detection Assistant

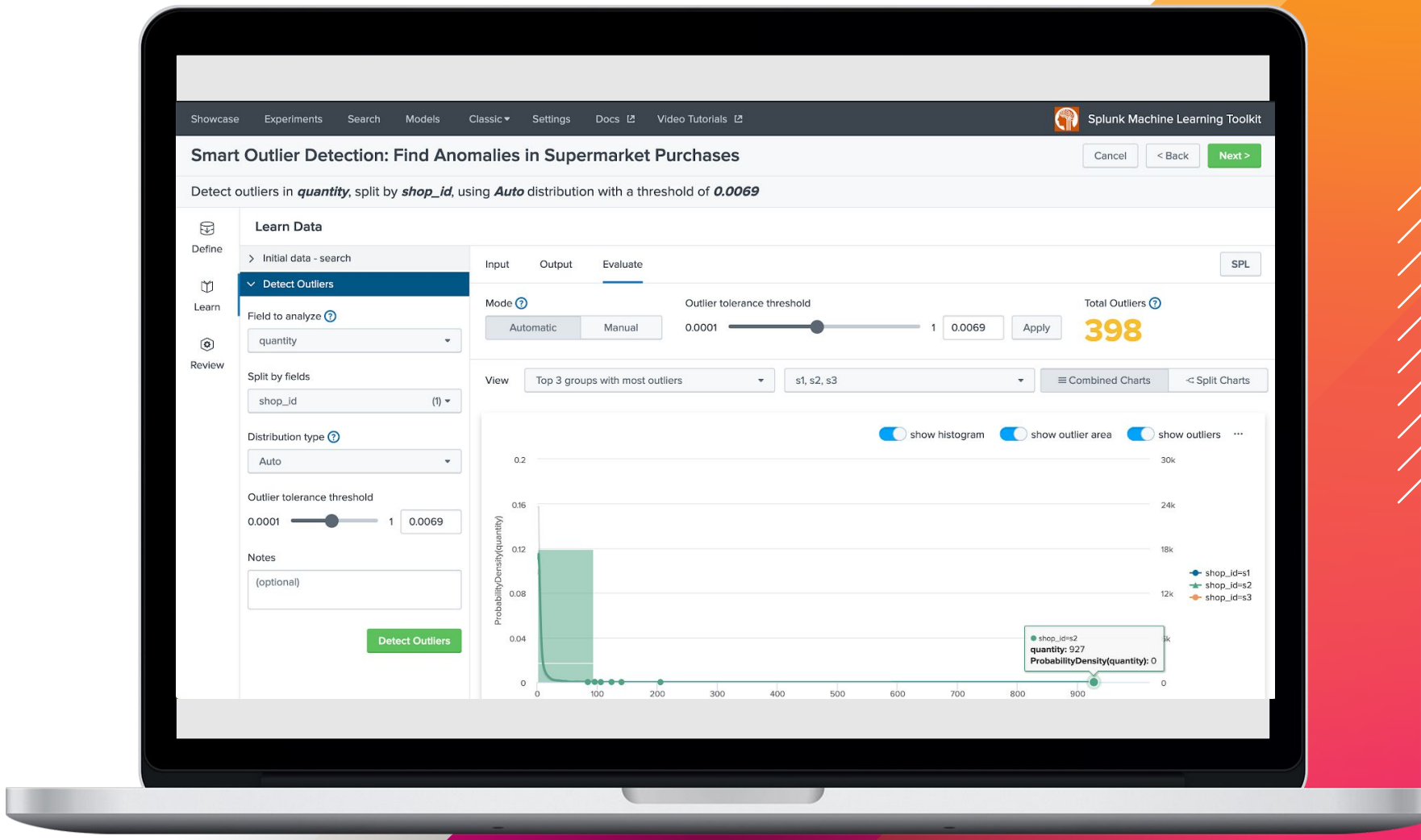
3

Custom
ML

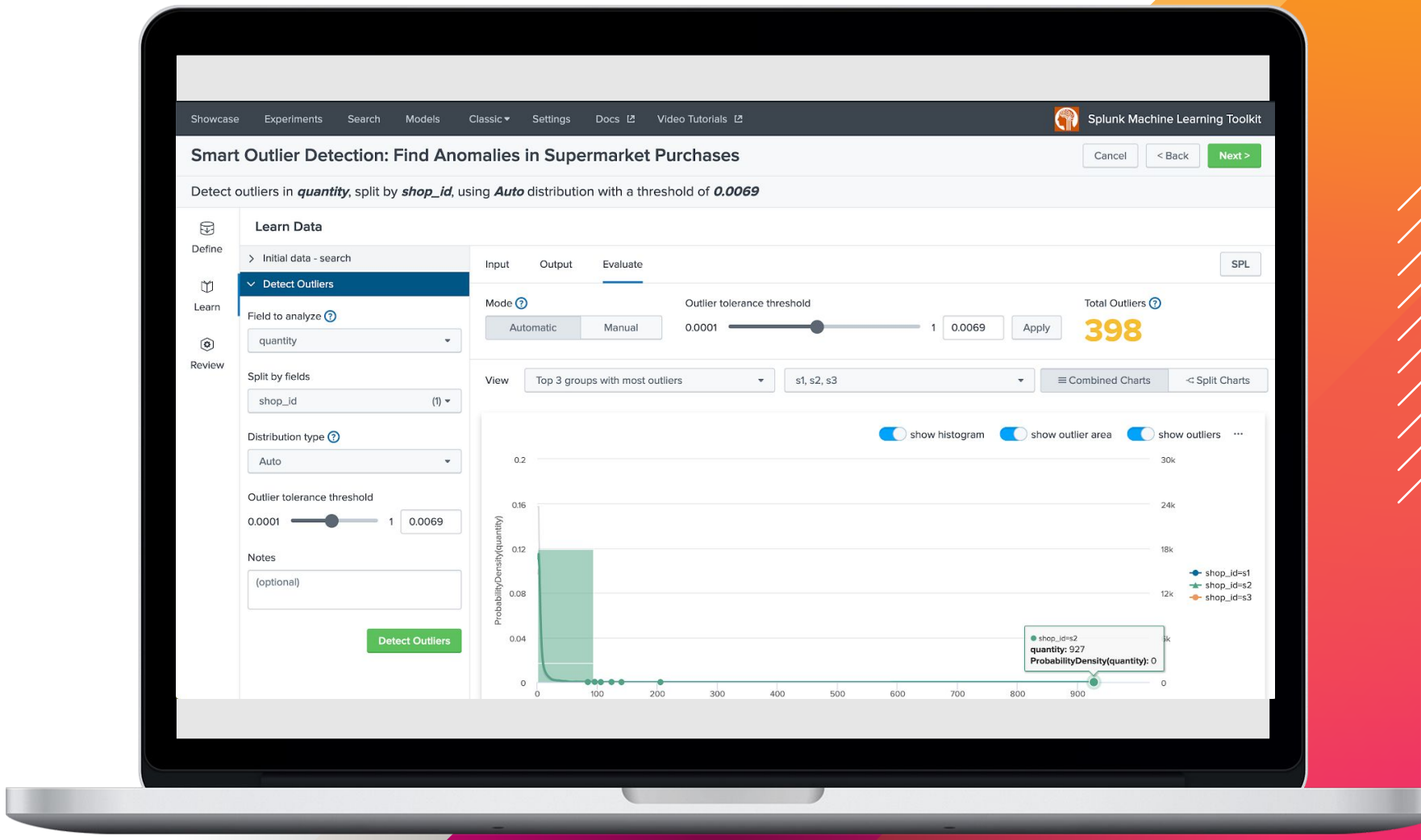
Numeric Outlier Detection Assistant



Smart Outlier Detection Assistant



Smart Outlier Detection Assistant



Custom ML

- Custom ML Outlier Detection Blog (link)
- Add Custom ML Alg (link)

Forecasting

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T-Mobile

Predict future outages by forecasting congestion rates of cell towers.

IT1722 - Predict Real World Outage using Splunk MLTK

Wednesday, October 23, 12:30 PM - 01:15 PM

Vijay Veggalam, Member of Technical Staff, T-Mobile
Gintaras Gaigalas, Sr. RF Engineer, T-Mobile

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TransUnion

Eliminate out-of-disk outages by forecasting disk usage and creating what-if scenarios.

FN1137 - Forecasting Disk Usage with Machine Learning – So easy, even a cave-person can do it!

Tuesday, October 22, 01:45 PM - 02:30 PM

Steve Koelpin, Splunk Advisor, TransUnion
Alicia Dale, Site Reliability Engineer, TransUnion

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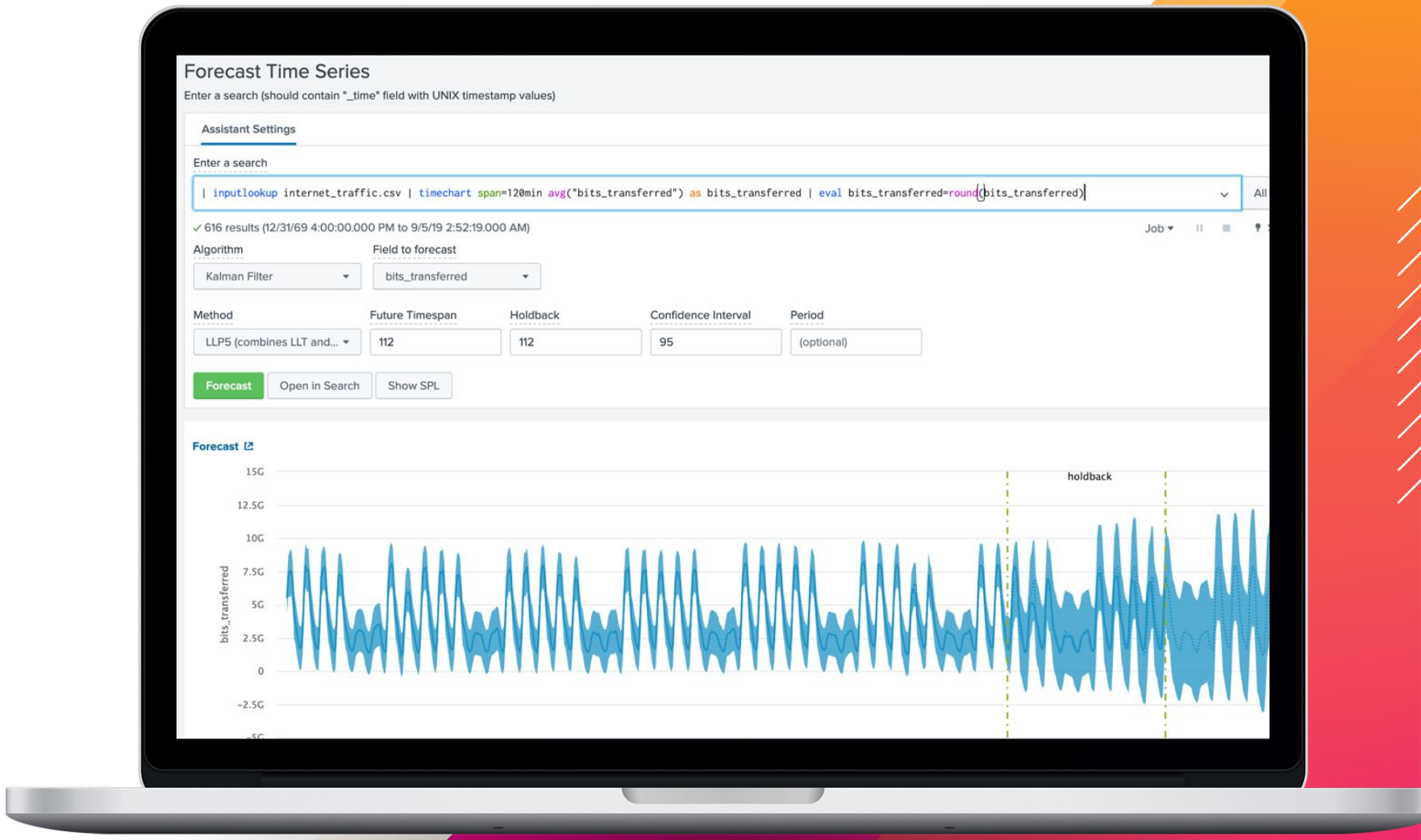
MLTK Offers

Time Series
Forecasting Assistant

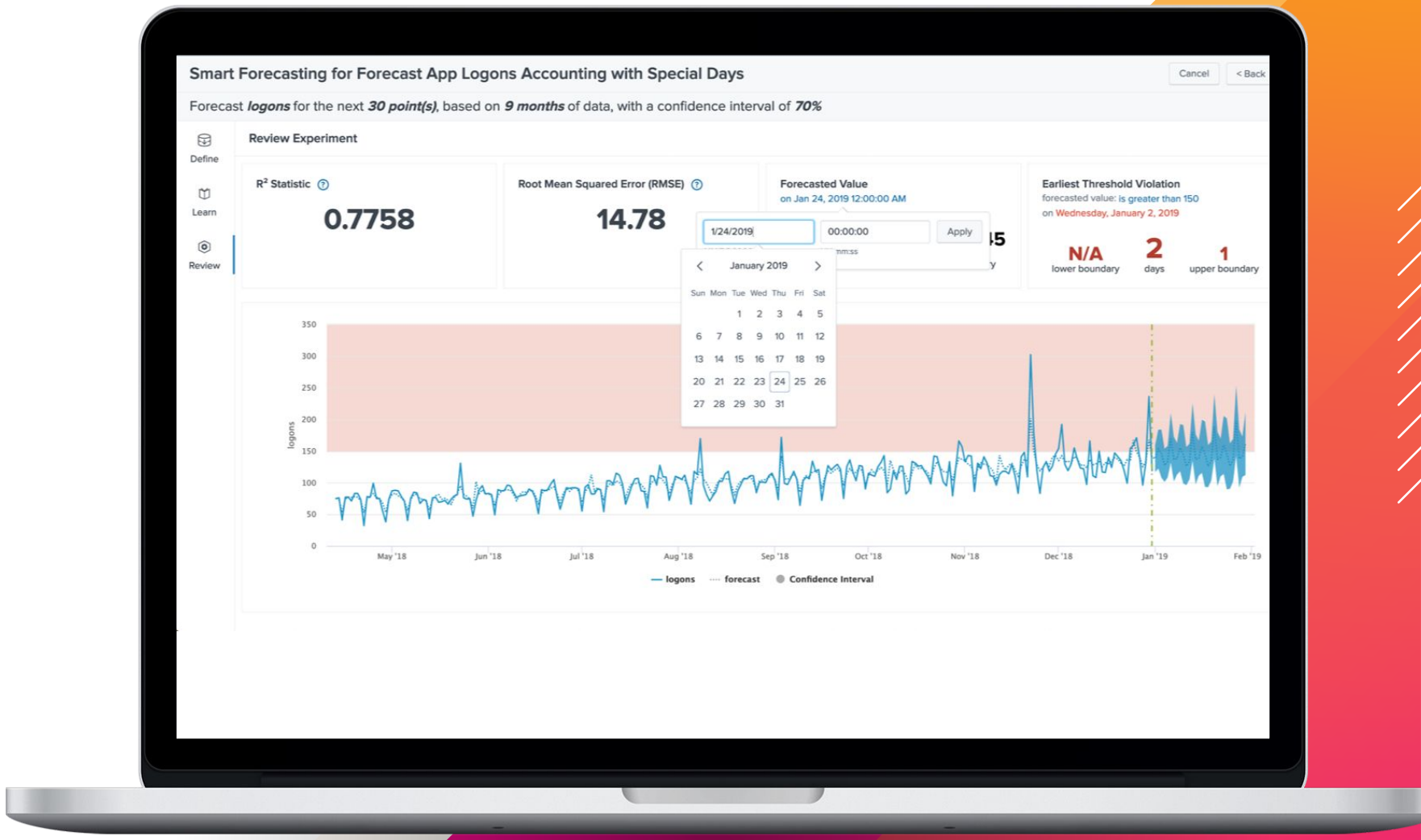
Smart Forecasting
Assistant

Custom
ML

Time Series Forecasting Assistant



Smart Forecasting Assistant



Clustering

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T-Mobile

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Aflac

Insurance Fraud Detection

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Thursday, October 24, 01:00 PM - 01:45 PM

Matthew Harper, Director, Cyber Crime Prevention, Aflac

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MLTK Offers

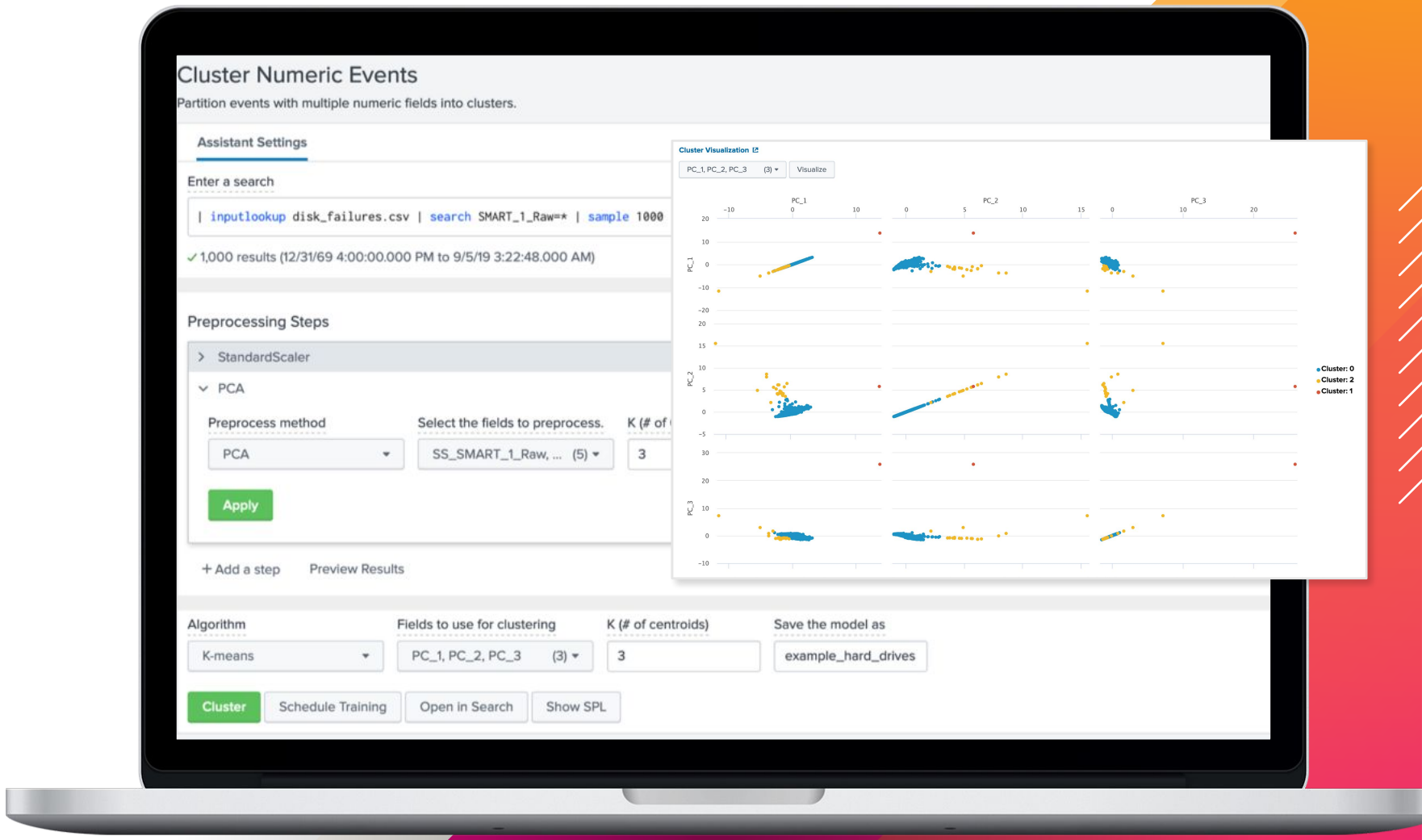
1

Cluster Numeric Events Assistant

2

Custom ML

Cluster Numeric Events Assistant



What's New?

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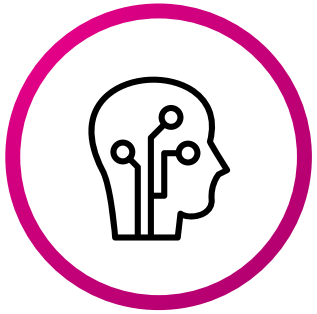
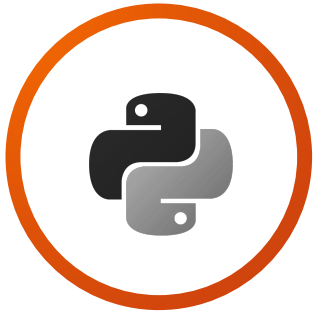
What's New?

MLTK 5.0



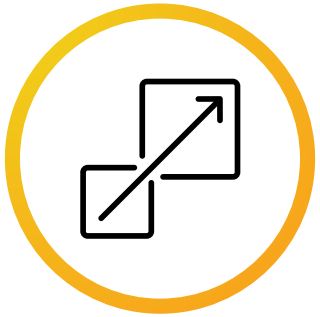
New smart assistants for forecasting and outlier detection, new algorithms,UI refresh, more examples

PSC 2.0



Upgrade to Python 3.7 for MLTK 5.0 and later versions. Networkx Library Support

Large Scale Splunk ML PoC



Visit us in the **Innovation Booth** to know more!

ML on Splunk Cloud Platform

ML-SPL on new Splunk Cloud Platform (SCP), ML-APIs on SCP

TF 2.0 and PyTorch Support

MLTK Container now supports TensorFlow 2.0 and Pytorch (Only PS Offering).

How to Reach Us?

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Reach out to us for feedback and suggestions

mlprogram@splunk.com

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Thank You !

Go to the .conf19 mobile app to

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