



it's about time

# Kx Machine Learning

## Kx25

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18 May 2018



# Introducing the Machine Learning Team

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Kx ML team aims to

- Bring ML capabilities to q
- Develop tools to help Kx user-base
- Provide guidance and support for ML projects



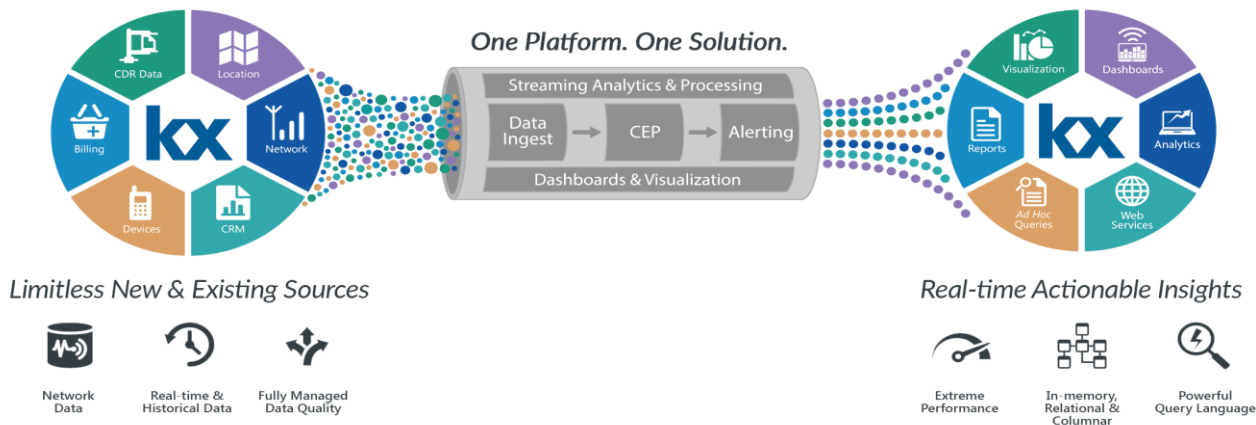
## Finance

- Alpha generation
- Portfolio optimization
- Trade surveillance
- Process automation

## Non-financial applications

- Retail for range optimization and customer categorization
- Manufacturing for predictive maintenance
- Utilities for network optimization

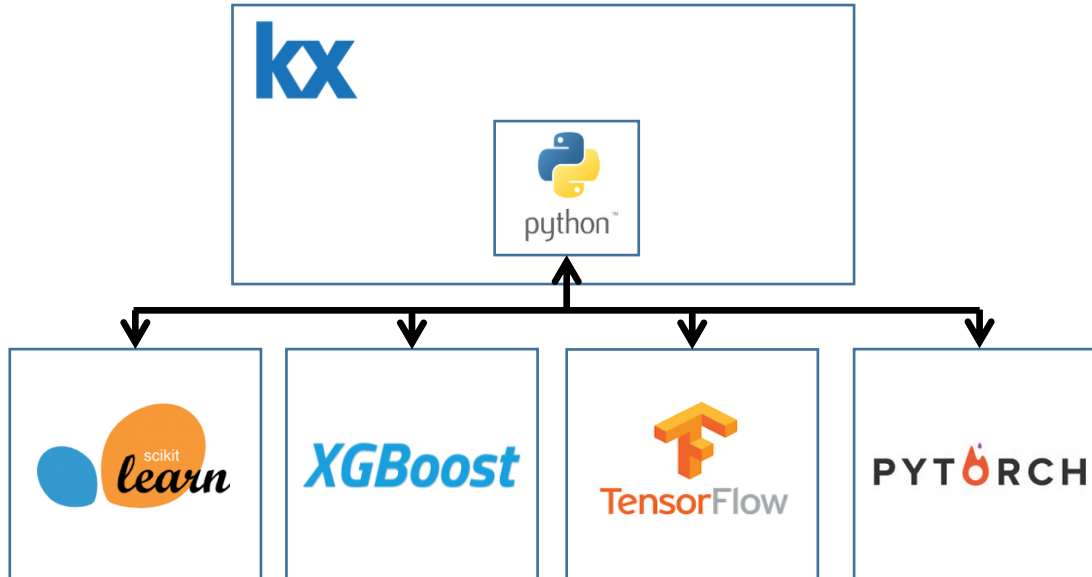
- Array + time-series operations (feature engineering)
- Streaming analytics (online training + real-time prediction)
- Scalability (learning from massive datasets)



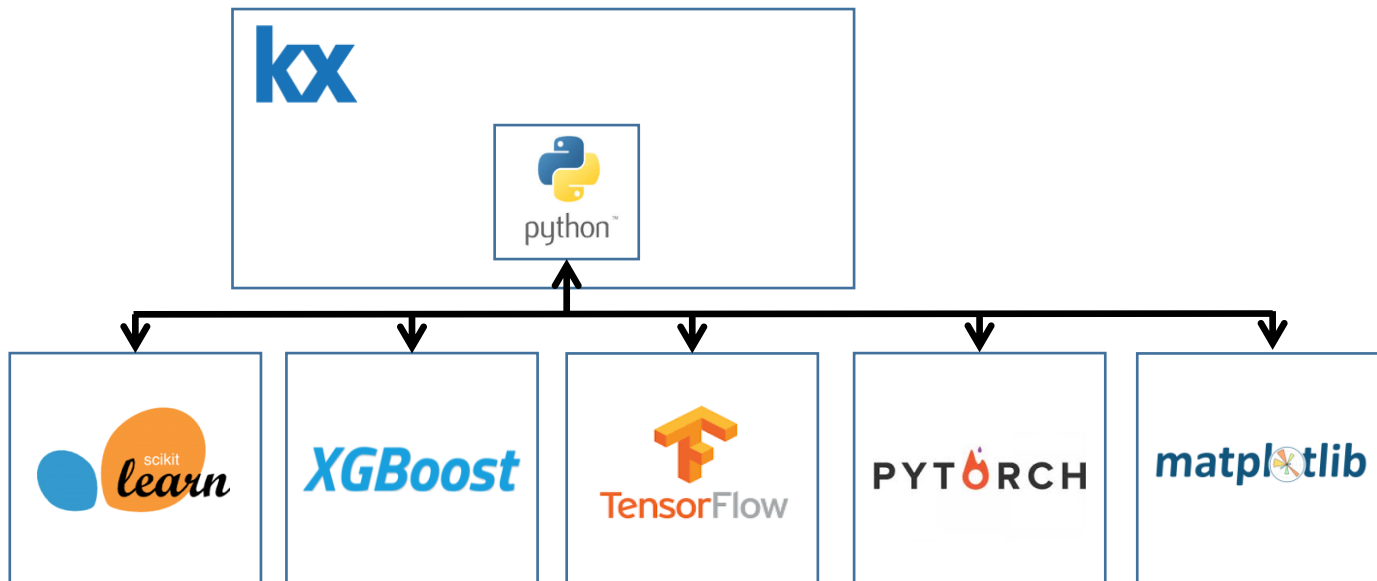
- Python *inside* q



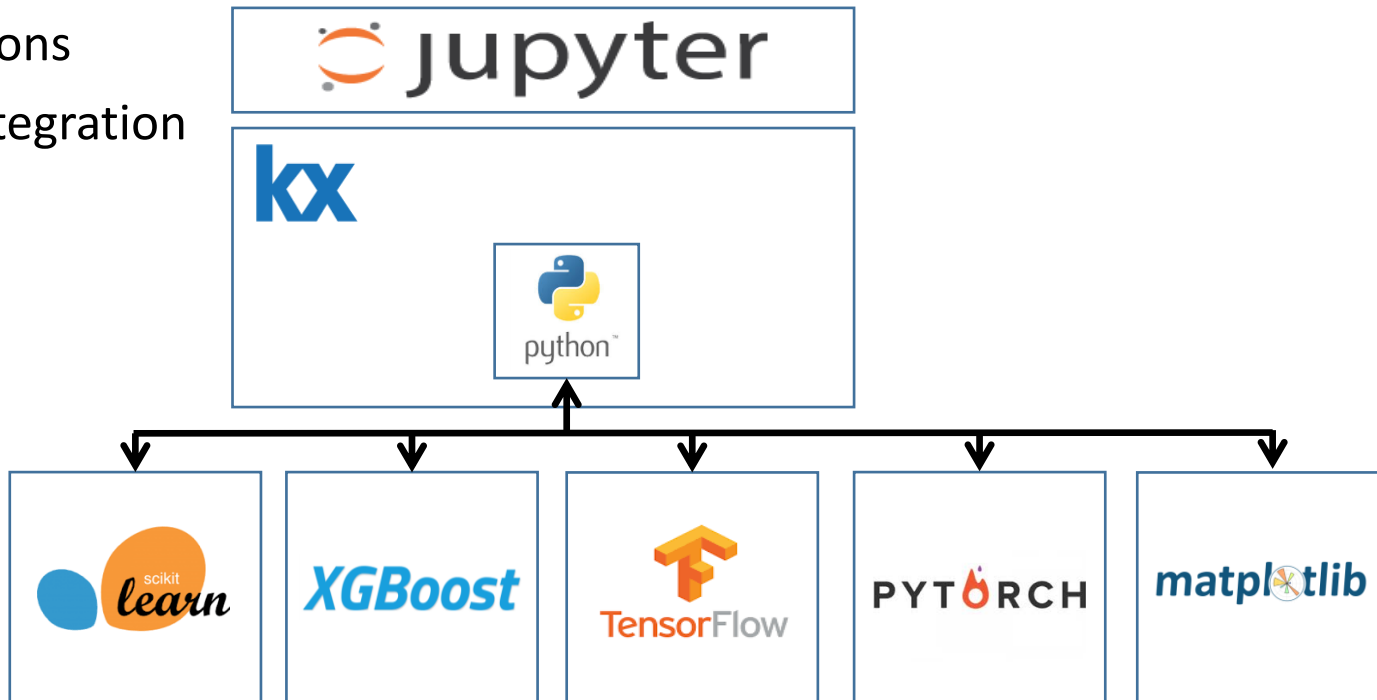
- Python *inside* q
- Access to world of Machine Learning



- Python *inside* q
- Access to world of Machine Learning
- Visualizations



- Python *inside* q
- Access to world of Machine Learning
- Visualizations
- Jupyter integration



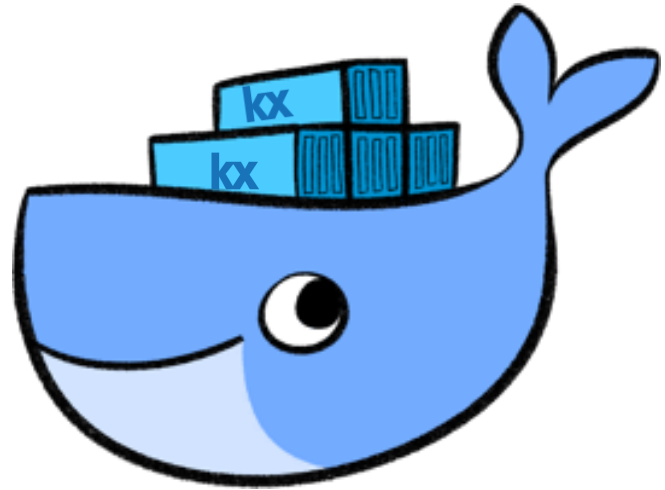




# Docker Integration

Self-contained ML environment

- Run q in Docker (including on-demand)
- Images for embedPy and jupyterq
- Images for example notebooks
- Available directly from Docker Hub



ML libraries will be

- Free to all users (including 64-bit commercial use)
- Open source (available at [github/kxsystems](https://github.com/kxsystems))
- Under Apache 2 licence
- Documented, maintained and supported by us



# Thank you!

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## Contact:

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Machine Learning Team

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## Website:

<http://code.kx.com/q/ml>

## Github:

<https://github.com/kxsystems>