

# What

## *What is Flek Machine?*

- ✓ Flek is a unified framework for AI Analytics.
- ✓ Flek is a foundational development library. Its platform includes 3 main components: FlekML, Flek-Server and Python Toolkit .
- ✓ Flek allows AI citizens to build probabilistic models, develop ML-driven applications as well as run both exploratory and predictive analytics – all in one integrated platform.



# Who

## *Who uses Flek?*

- For organizations, Flek is intended to:
  - *SME* (small to medium enterprises) that need to apply ML and cannot afford a full-time data science professional.
  - *Larger enterprises* that need a fully integrated platform to help them answer varied AI questions – without drowning in a swamp of complex models and pipelines that are very difficult to maintain and share among different users and use cases.
- For end users, Flek is geared to serve the needs of a mix of AI citizens: data scientists, programmers, statisticians and analysts.



# Which

## *Which applications is Flek suitable for?*

Flek is geared towards AI applications that require complex analysis, prediction, recommendation or decision making, such as:

- Customer conversion investigation
- Customer journey analysis
- Ecommerce recommendation
- Simulation & What-IF analysis
- Profile segmentation & analysis
- Campaign list filtering
- Market basket analysis
- Medical diagnosis advise
- Medical test recommendation
- Insurance claim decision
- Preventive maintenance
- Anomaly detection
- Bias detection & analysis
- Factor analysis



# How

## *How does Flek make AI Analytics easier?*

Flek makes AI Analytics easier by bridging the gap between data and insight. It carries out this by:

- Helping leverage existing expertise (people), data (SQL databases) and workflows (pipelines) within an organization.
- Simplifying machine learning, model building and model maintenance.
- Enabling models to be shared for both exploratory and predictive analytics across the organization and for a variety of AI citizens.
- Integrating in one Python Toolkit: data preparation, model building, querying, mining, auto-discovery , visual exploration, prediction and recommendation.



# Why

## *Why did we build the Flek Machine?*

For some 350 years no one has build a Probability machine so we set on building the 1<sup>st</sup> one. Mathematically, Flek is designed to:

- ✓ Make it easy to model complex multi-variate events that do not follow a known probability distribution.
- ✓ Help run probabilistic computations or simulations.
- ✓ Tackle difficult uncertainty problems that require access to the full joint and conditional probability distributions.
- ✓ Allow users to interact dynamically with a running engine instead of working with a set of fixed algorithms or functions.

