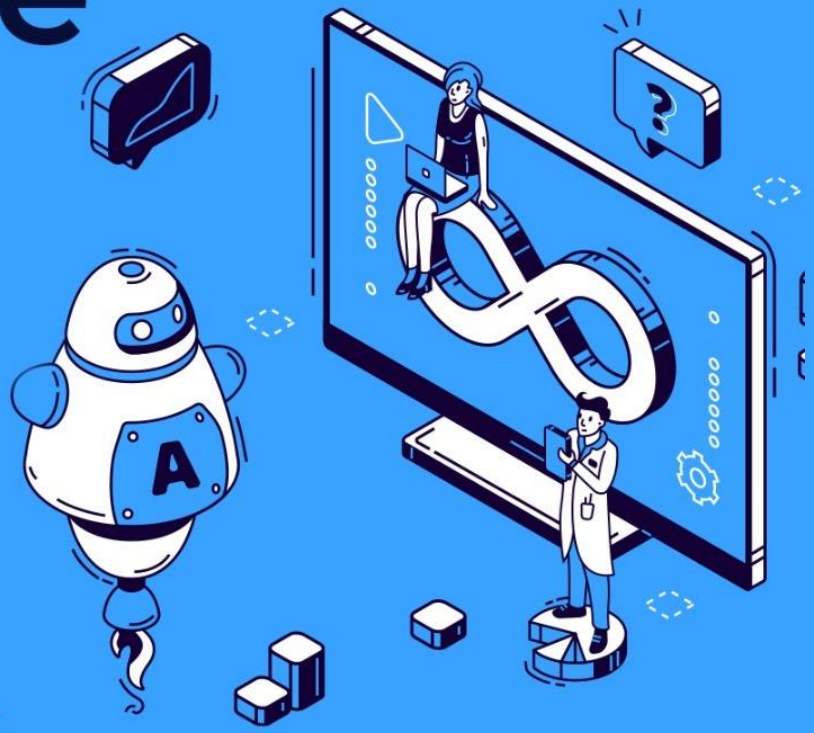
ML & MLOps in Azure



Speaker: **Sammy Deprez**
Senior Consultant, Arinti
Microsoft MVP

Brought to you by

Ai Kenya CODE MAKTABA

In partnership with

arinti and and Strathmore UNIVERSITY

Hi There!

Husband, Father of 2

Founder & senior consultant at arinti

Microsoft AI MVP

Board member of Global AI Community

Microsoft Most Valuable Professional

WHO ARE MVPS?

WHAT IS THE MVP AWARD?

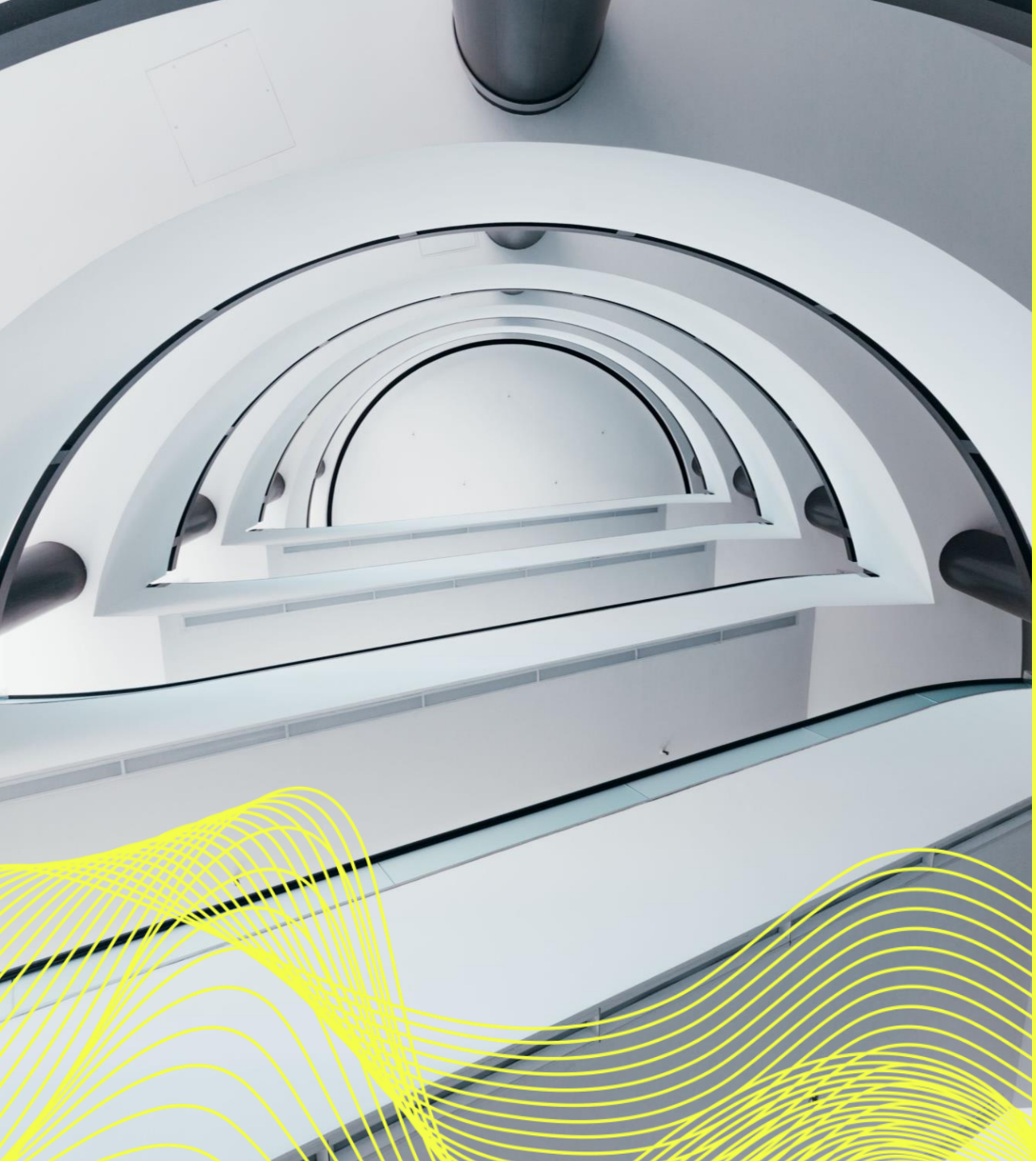
WHAT DOES IT TAKE TO BE AN MVP?

HOW CAN I BECOME AN MVP?

WHAT ARE THE BENEFITS

arinti


arinti



Mission

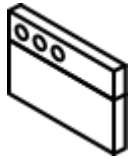
to help organizations grasp the power of the AI revolution

arinti

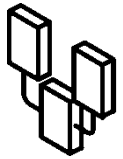
Services

Data Science
& Machine Learning

Conversational
Interfaces



Data Engineering

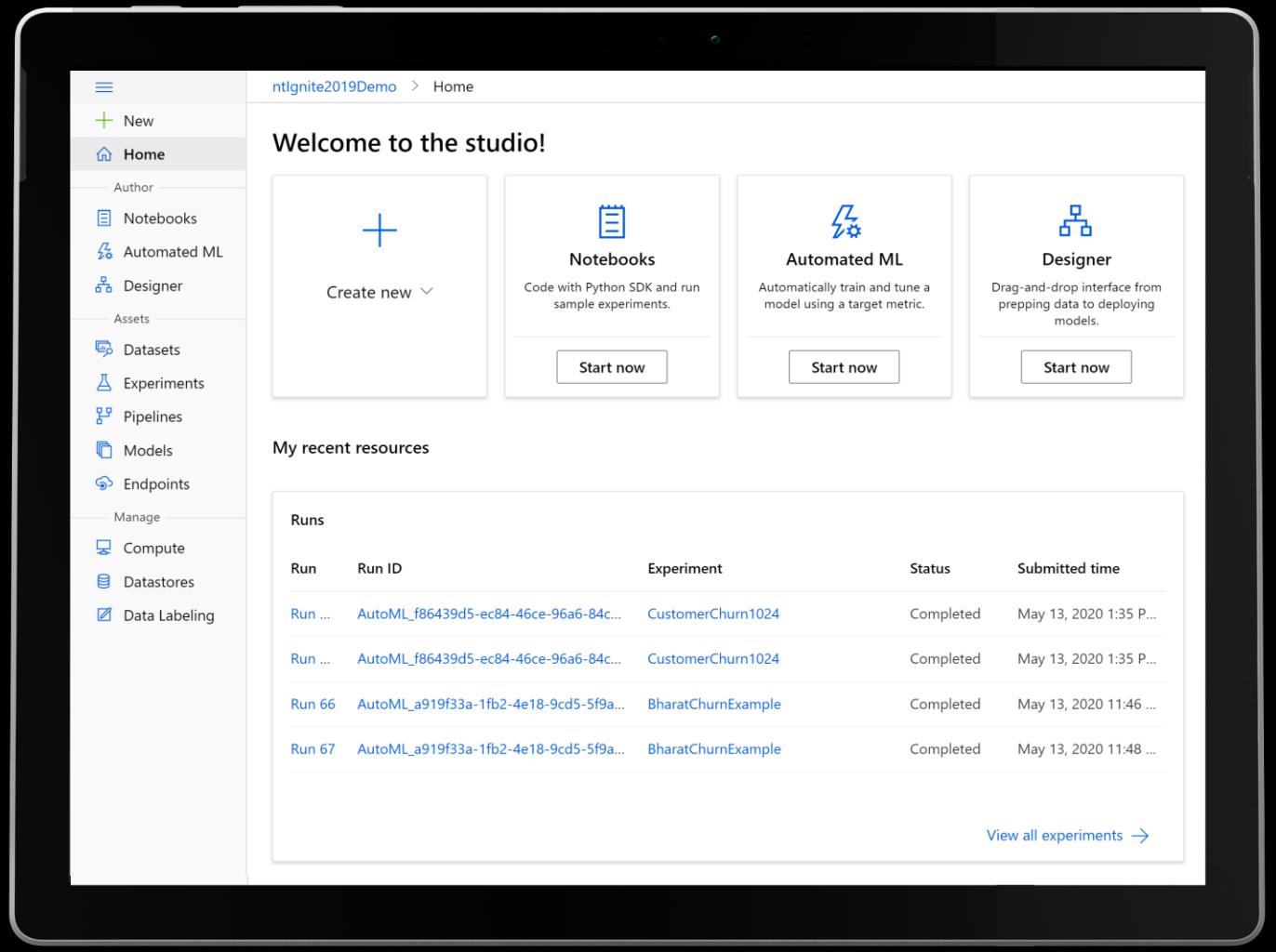


AI Training

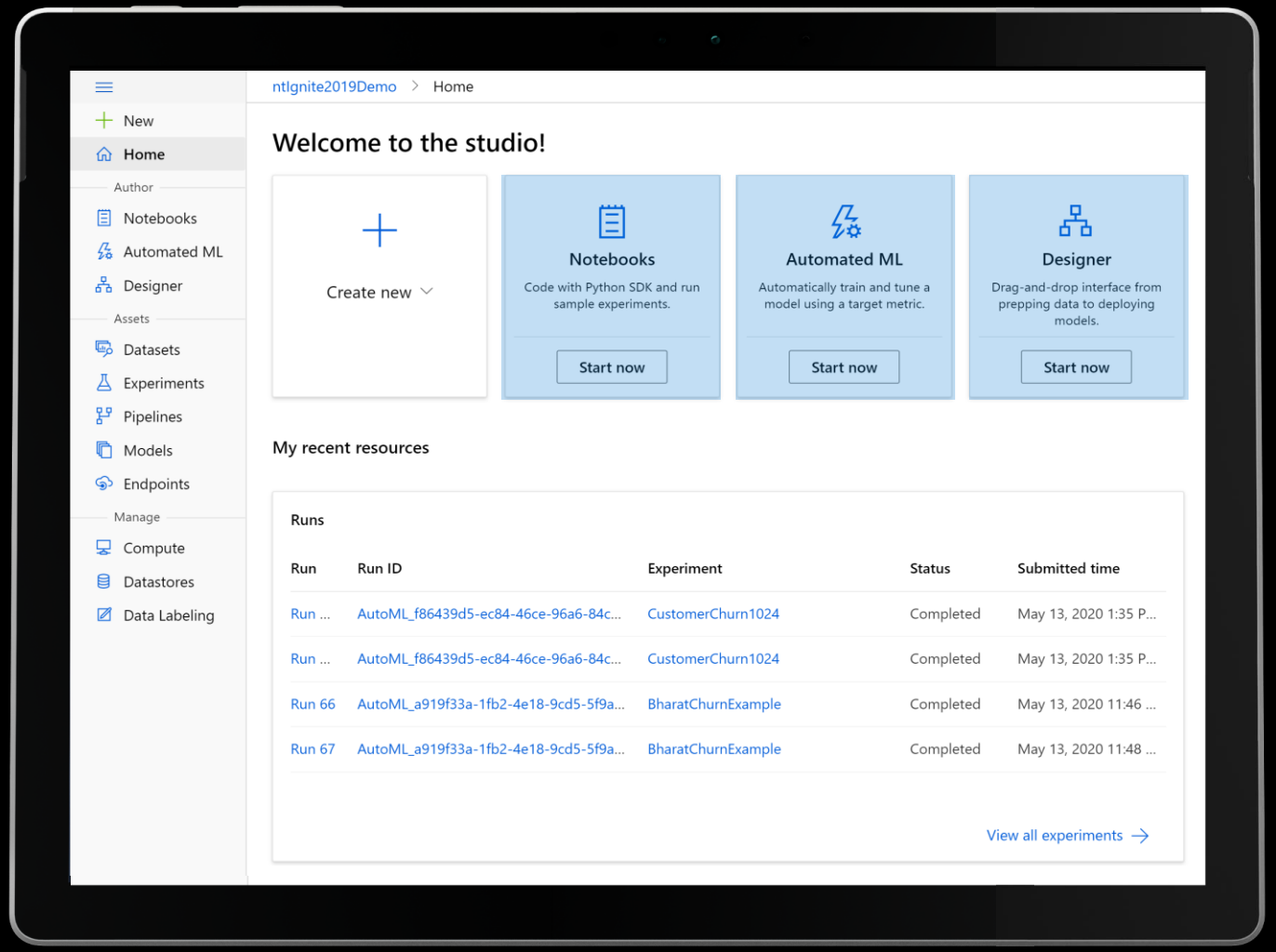
Azure Machine Learning

Azure Machine Learning

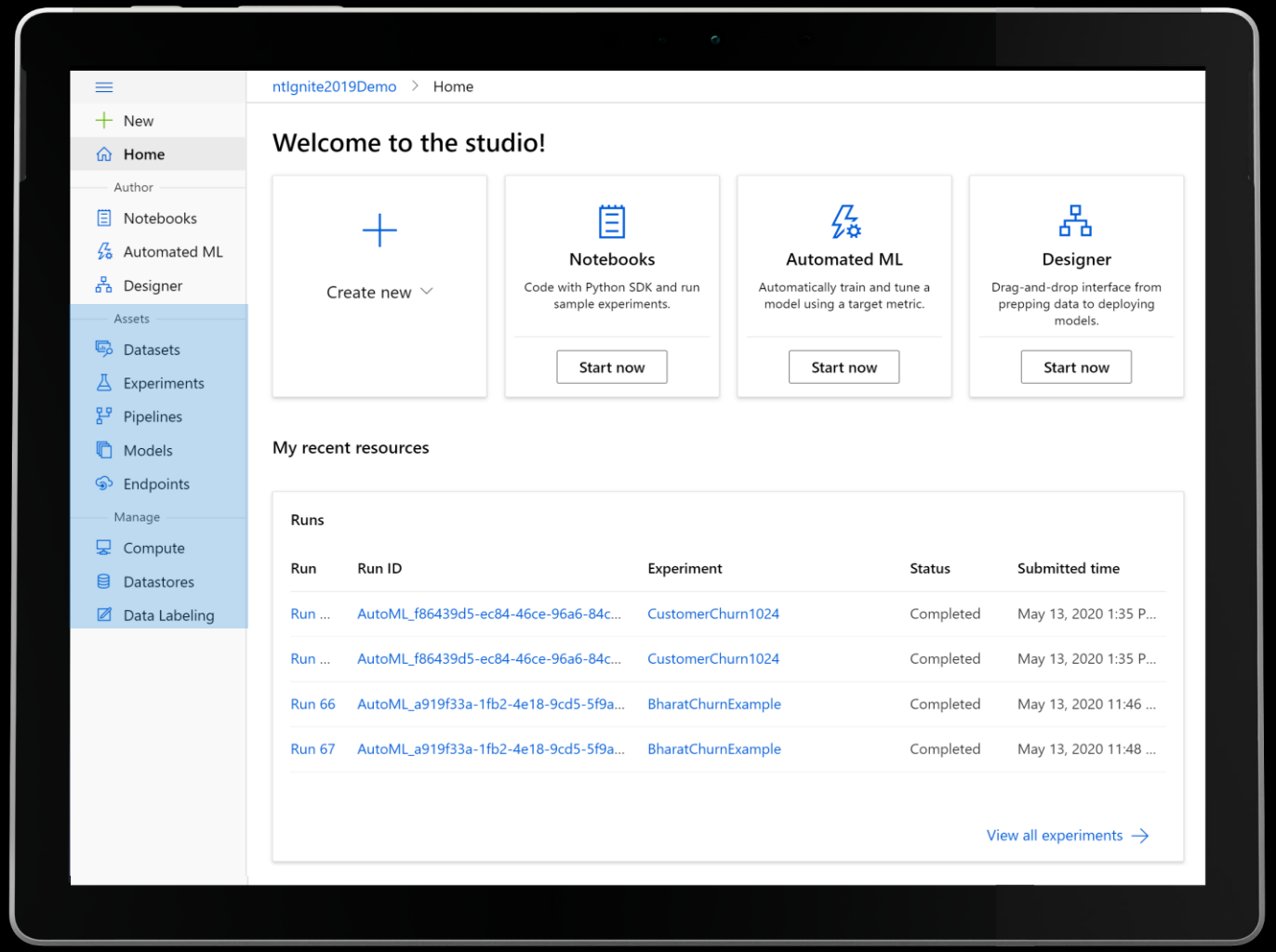
The central hub for your data science team



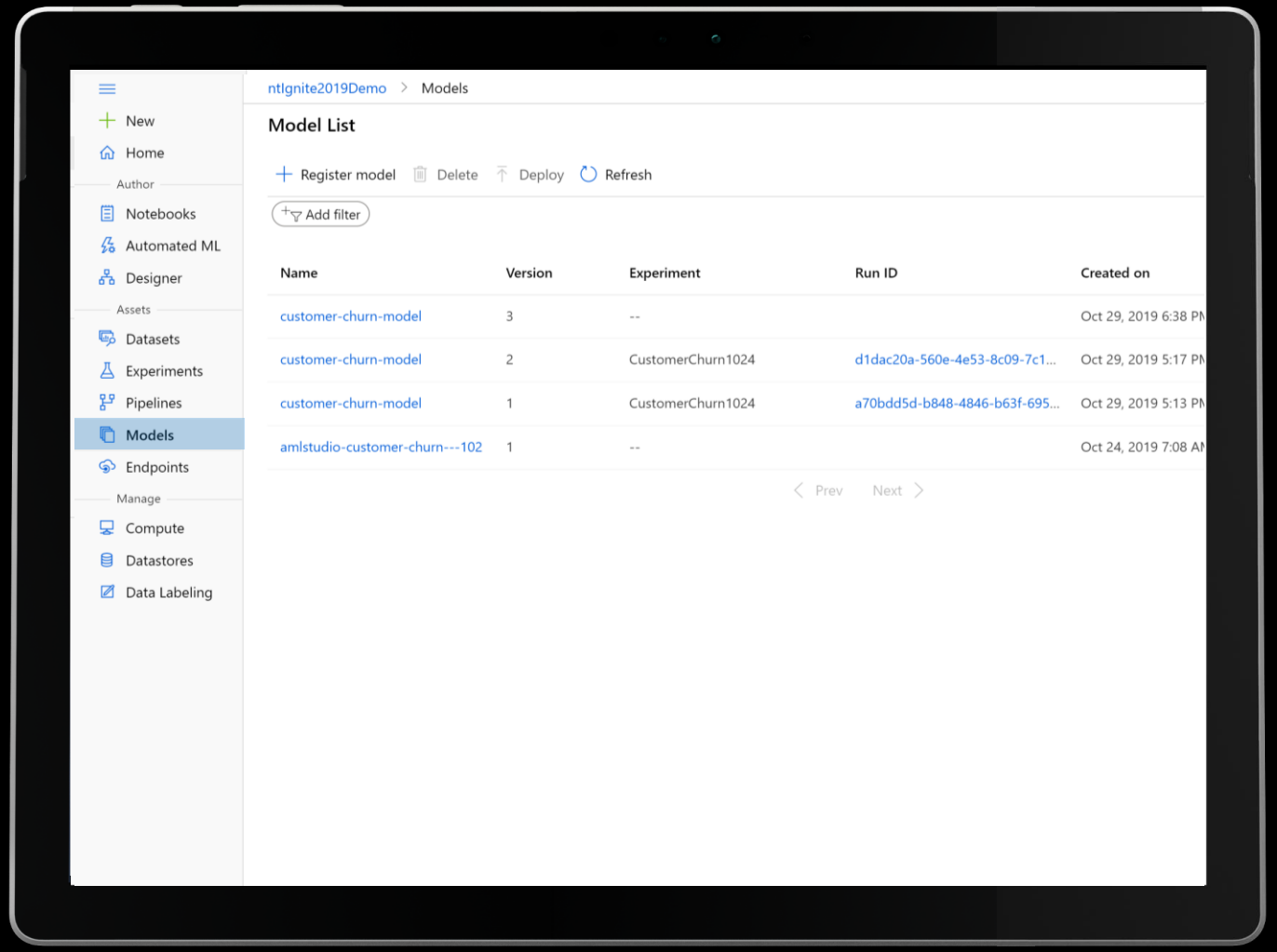
Build models your way



Manage all your ML assets



Unified model management



Azure Machine Learning

ML for all skill levels

Full lifecycle management with MLOPs

State-of-the-art Responsible ML

Open & Interoperable

Azure Machine Learning

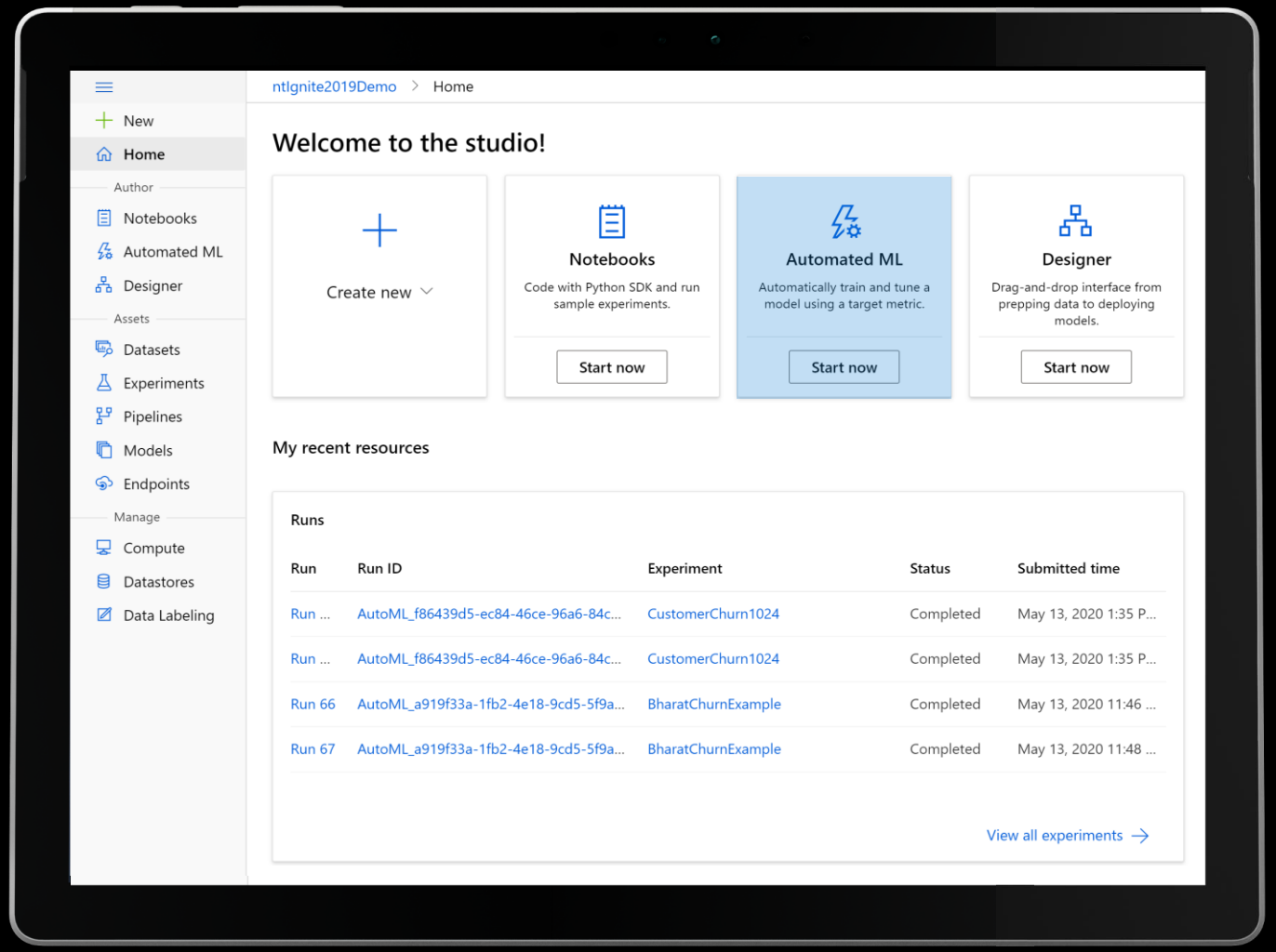
ML for all skill levels

Full lifecycle management with MLOPs

State-of-the-art Responsible ML

Open & Interoperable

Automated Machine Learning

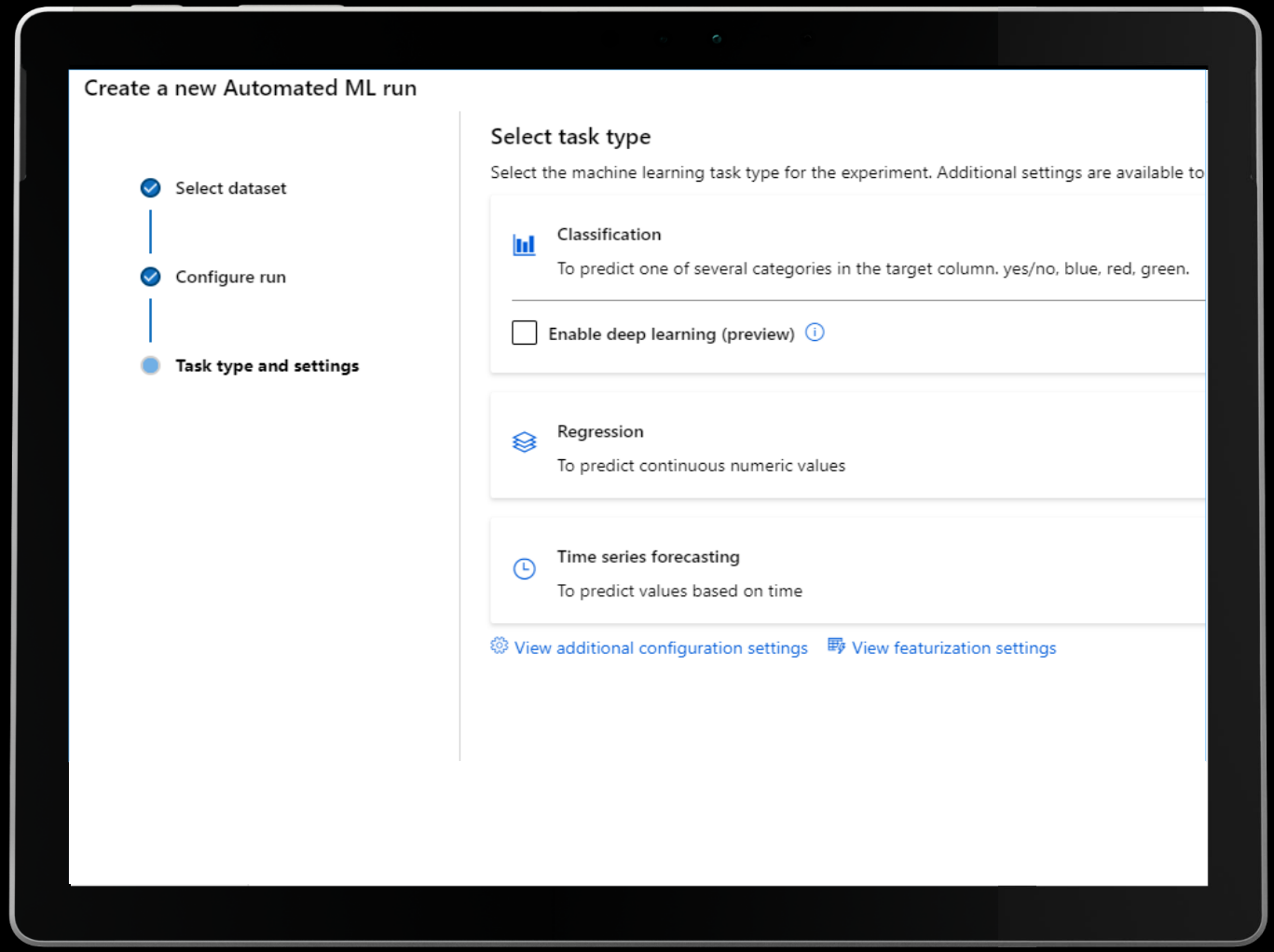


Automated Machine Learning

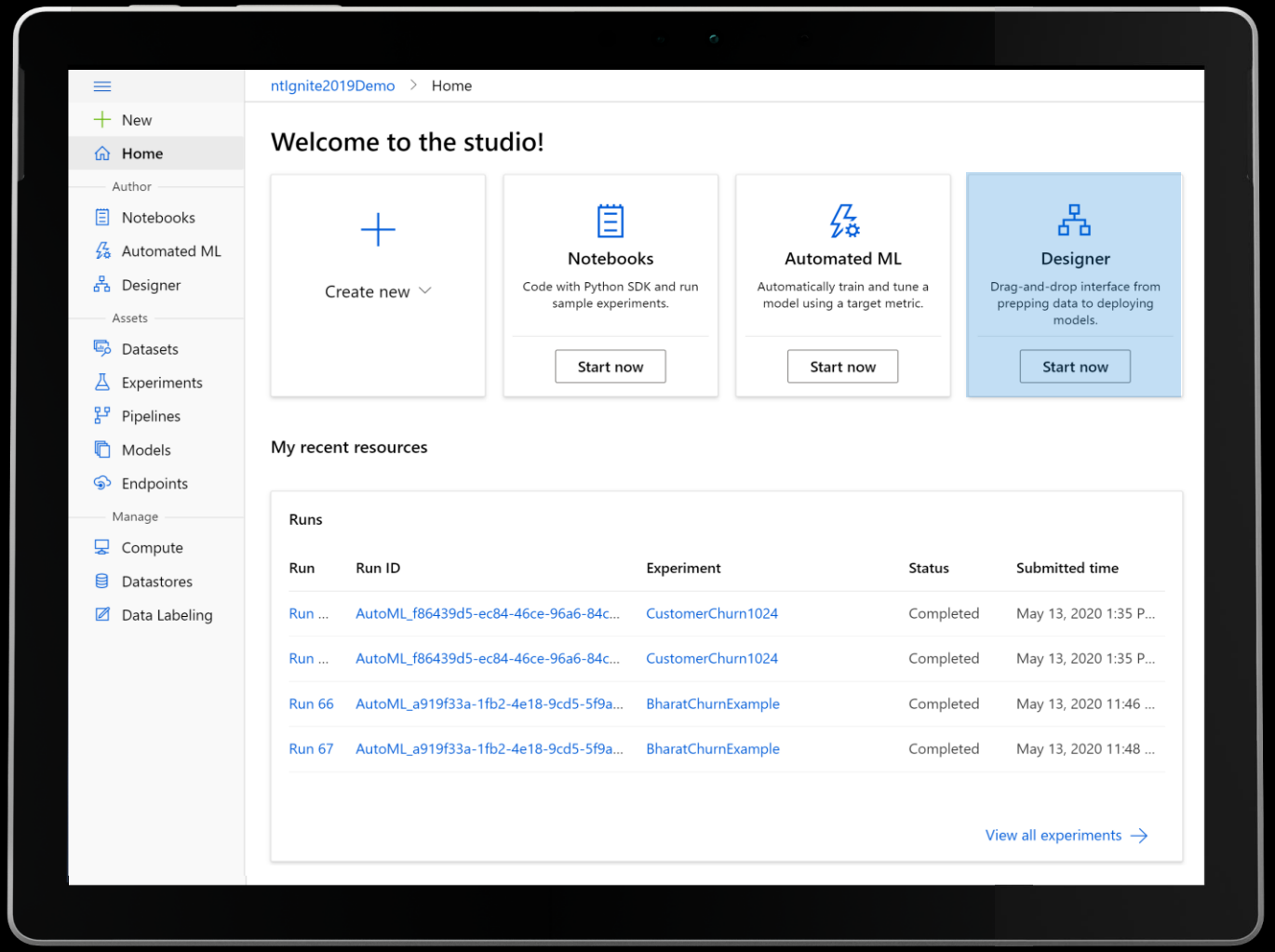
Automatically build and deploy predictive models using the no-code UI or through a code-first notebooks experience.

Rapidly create accurate models using a wide array of algorithms

Easily explore and profile data



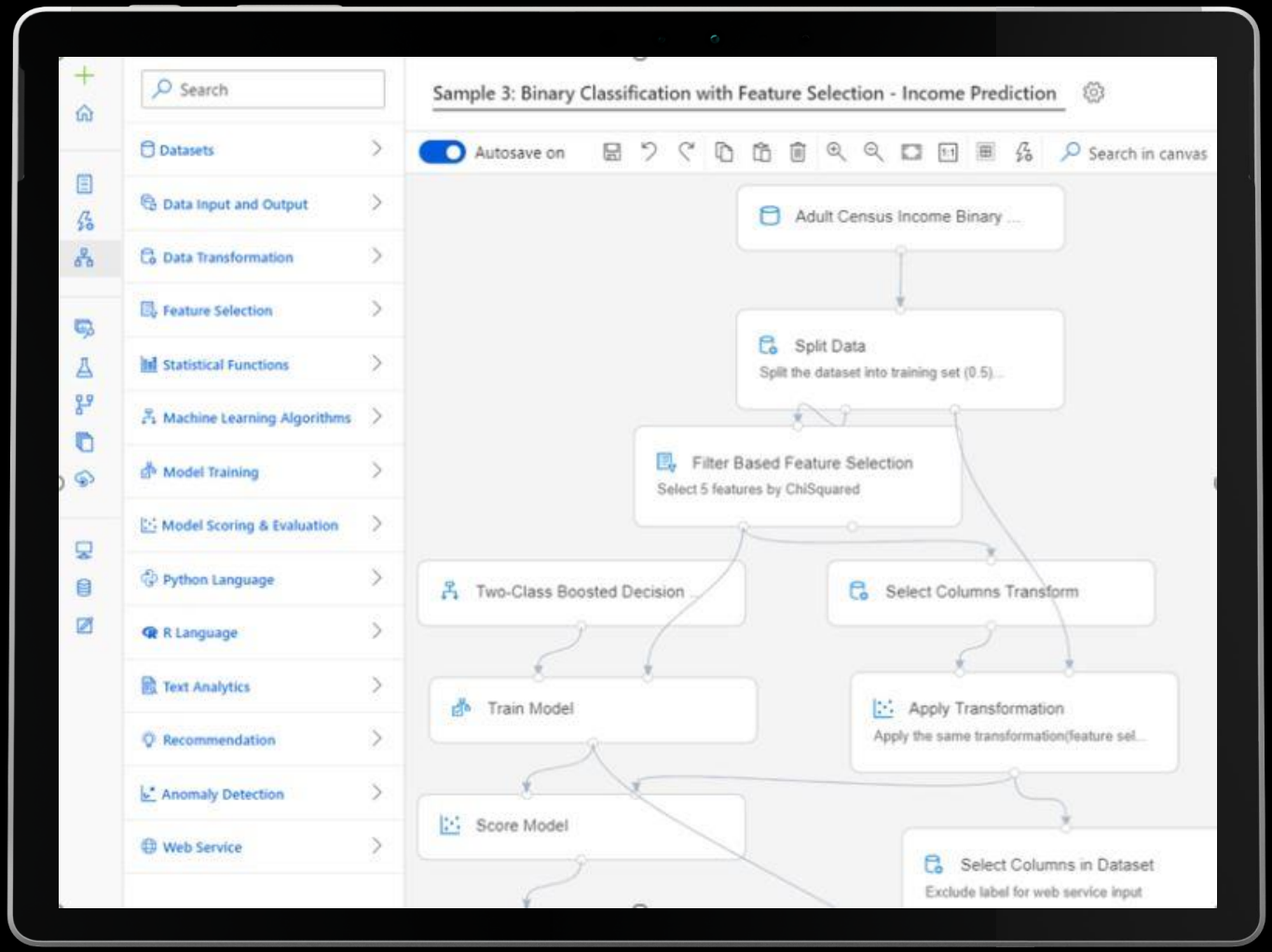
Drag & Drop Designer



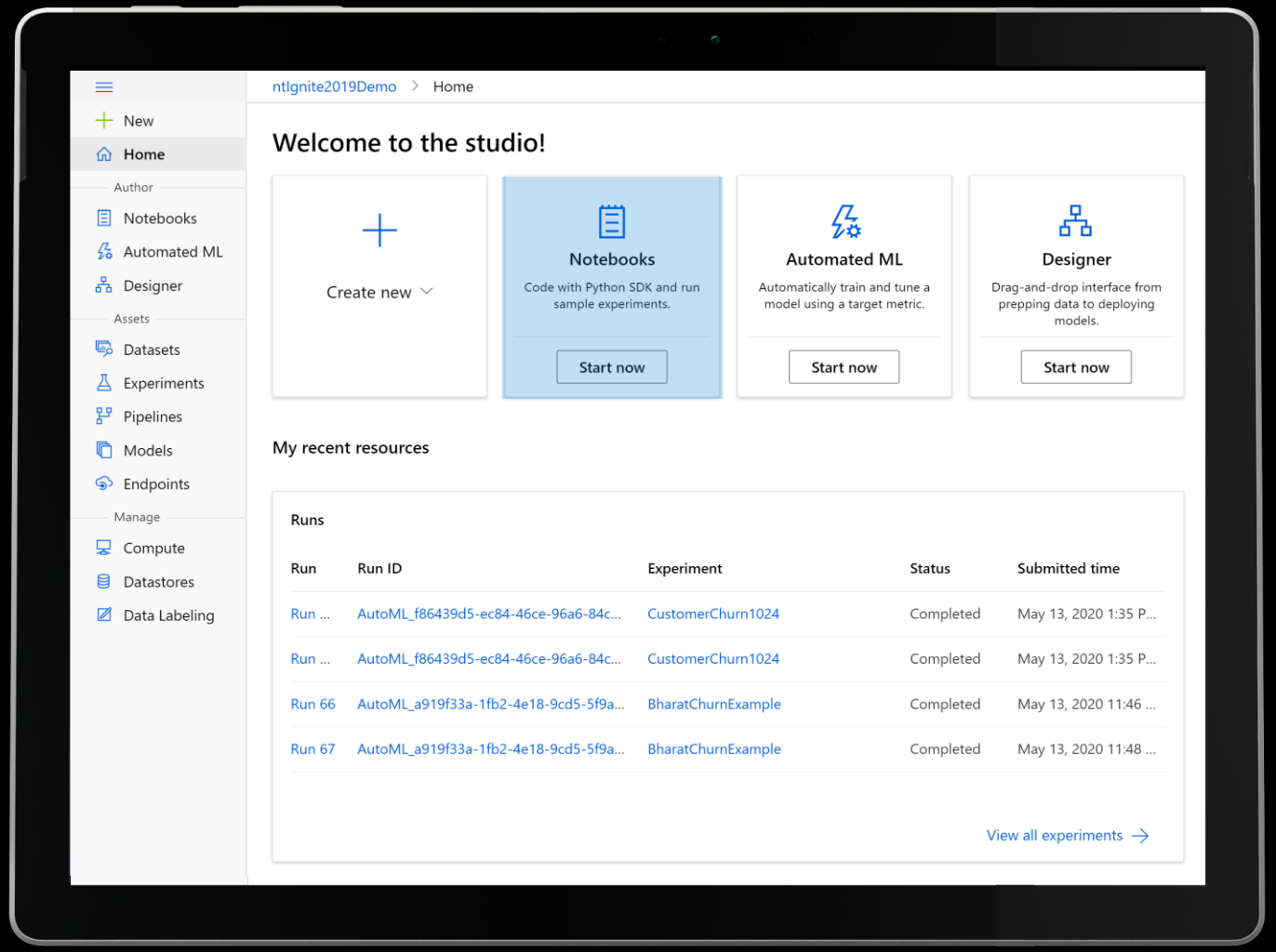
Drag & Drop Designer

Visual machine learning

Built-in modules for data prep, algorithms, deployment and other ML tasks



Collaborative Notebooks

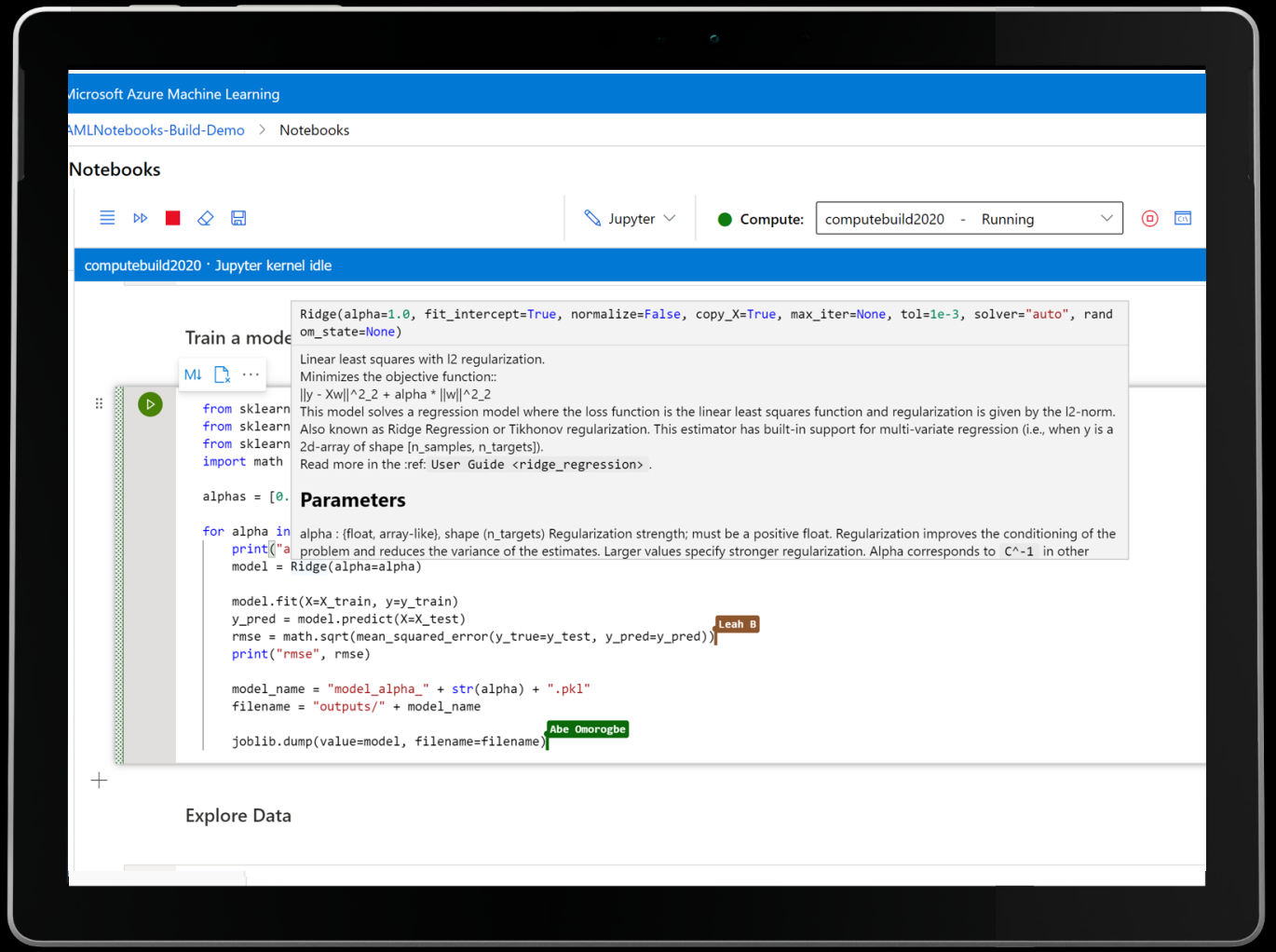


Collaborative Notebooks

Code-first development experience

Collaborative live authoring with shared notebooks

Powerful editor with Intellisense and code suggestions



Azure Machine Learning

ML for all skill levels

Full lifecycle management with MLOPs

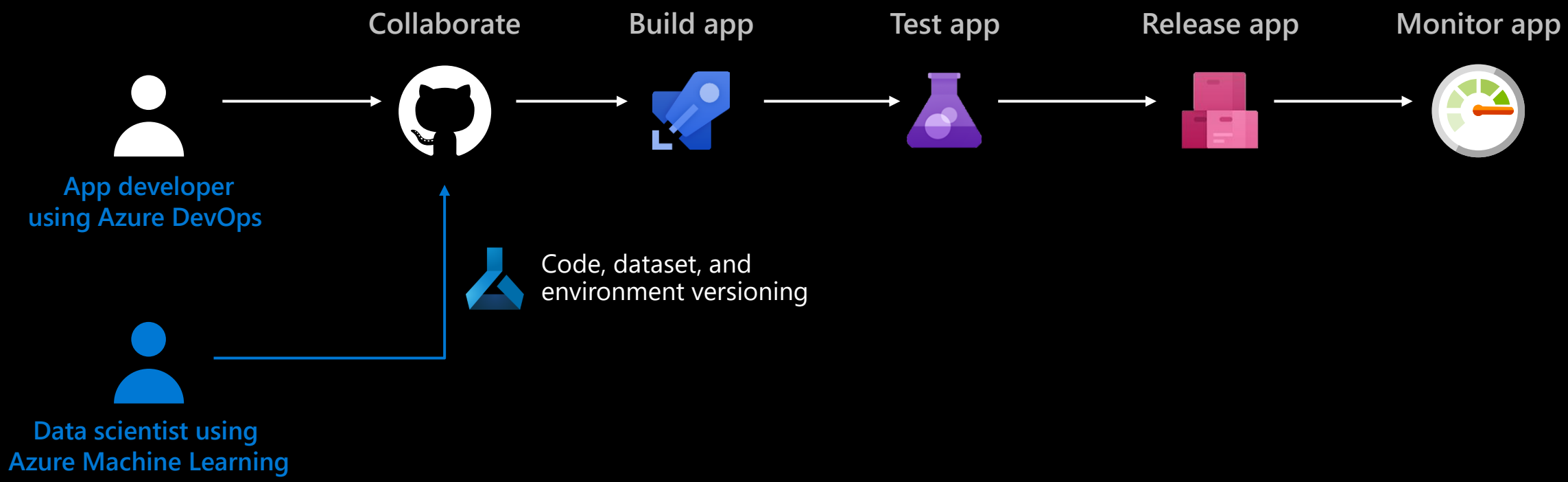
State-of-the-art Responsible ML

Open & Interoperable

MLOps

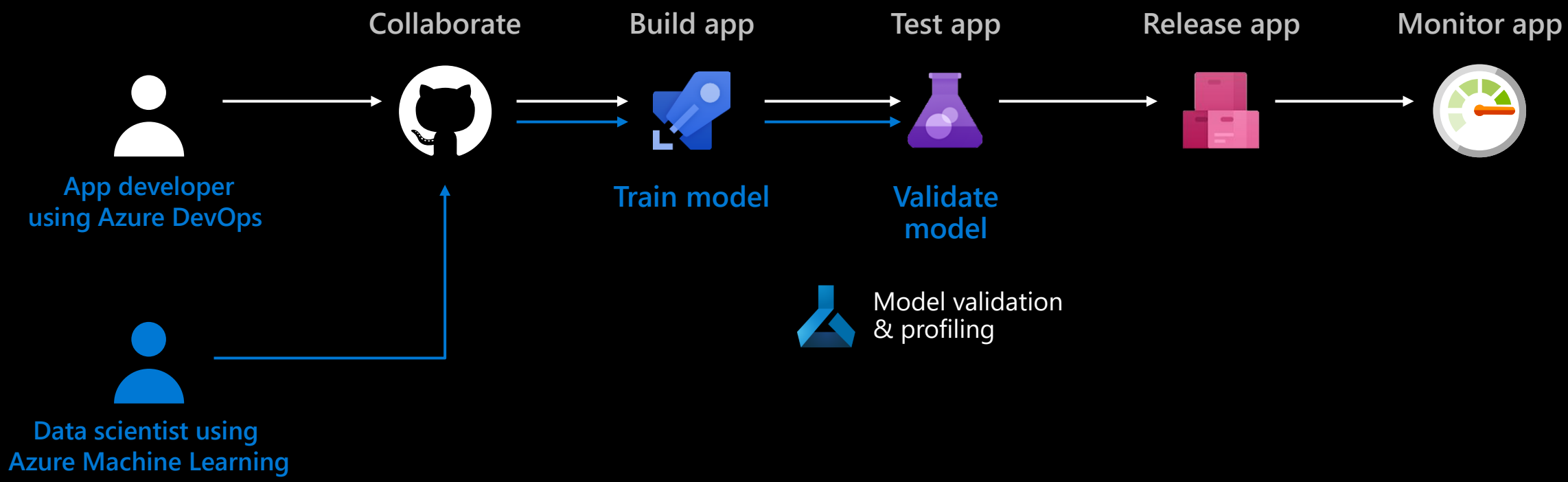
Model reproducibility | Model validation | Model deployment | Model retraining

MLOps with Azure Machine Learning



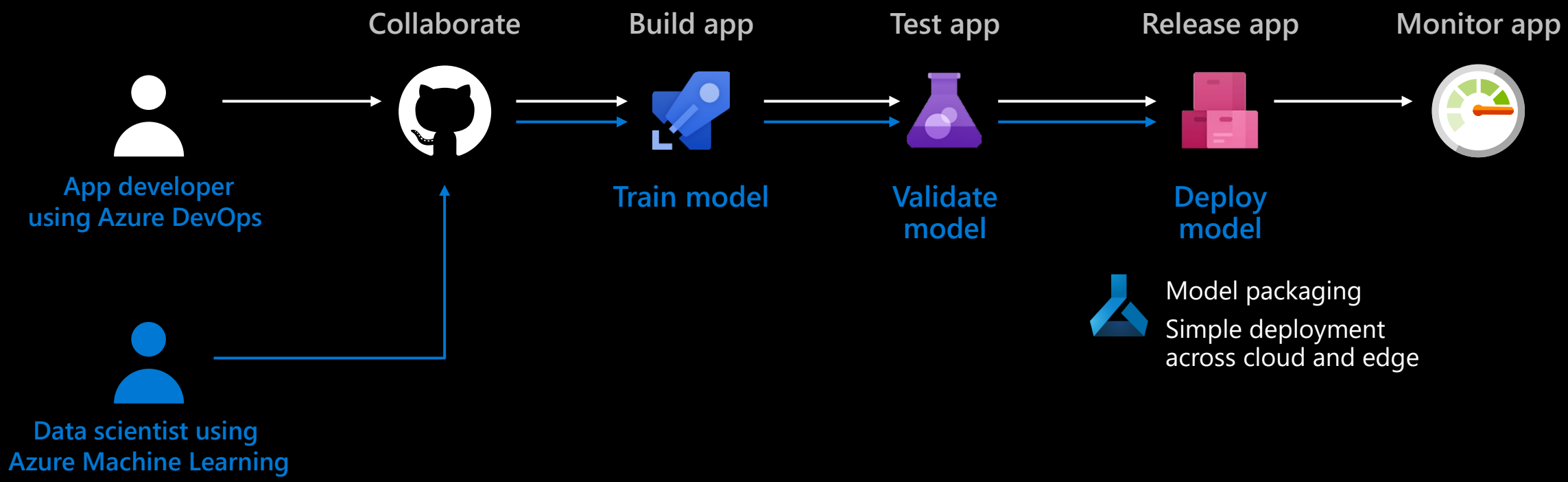
- [x] Model reproducibility
- [ ] Model validation
- [ ] Model deployment
- [ ] Model retraining

MLOps with Azure Machine Learning



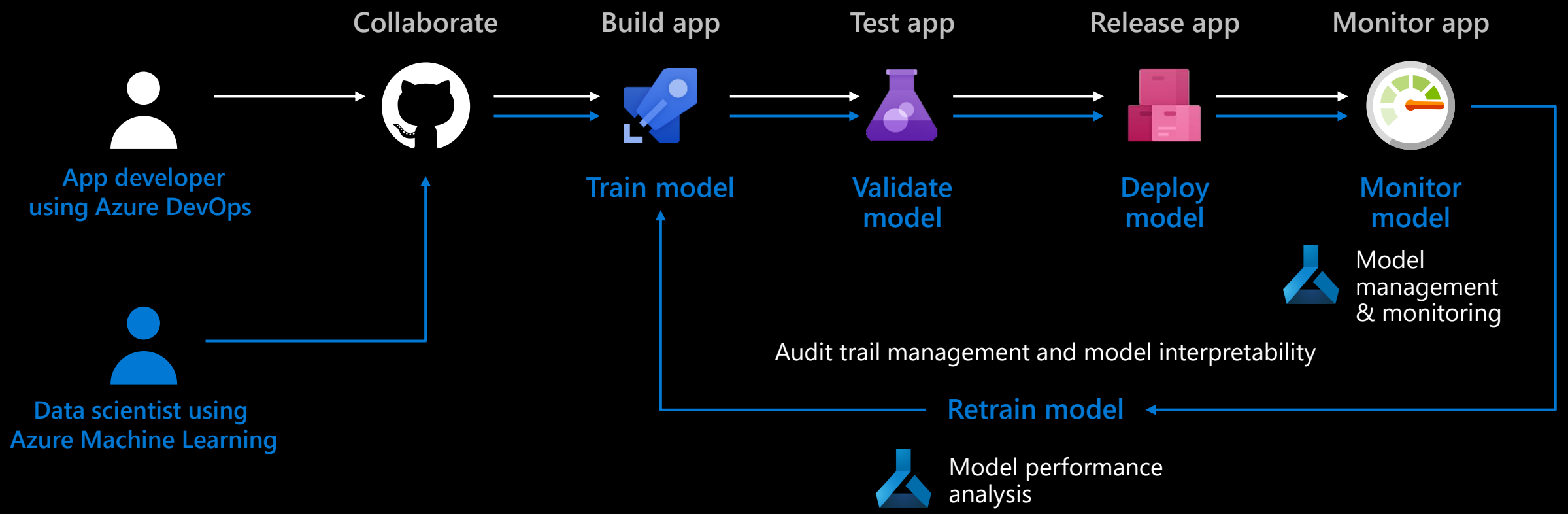
- [x] Model reproducibility
- [x] Model validation
- [ ] Model deployment
- [ ] Model retraining

MLOps with Azure Machine Learning



- [x] Model reproducibility
- [x] Model validation
- [x] Model deployment
- [ ] Model retraining

MLOps with Azure Machine Learning



- Model reproducibility
- Model validation
- Model deployment
- Model retraining

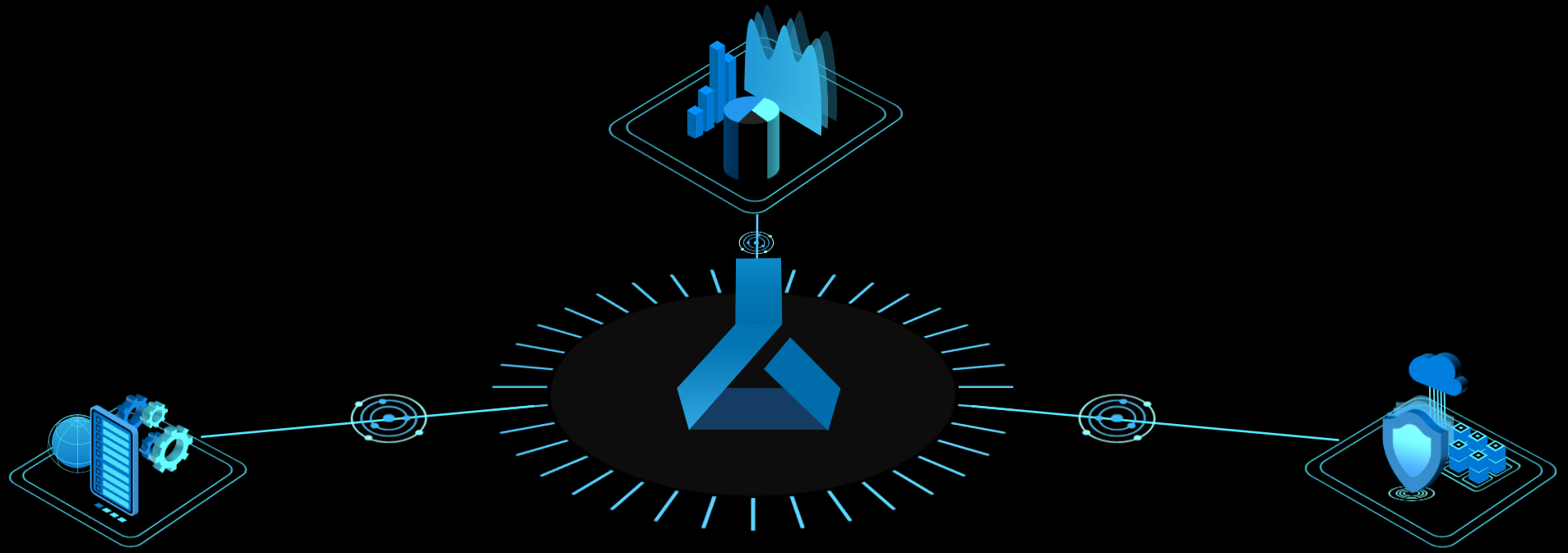
Azure Machine Learning

State-of-the-art
Responsible ML

Understand

Interpretability

Fairness



Control

Audit trail

Datasheets

Azure Machine Learning

Responsible ML

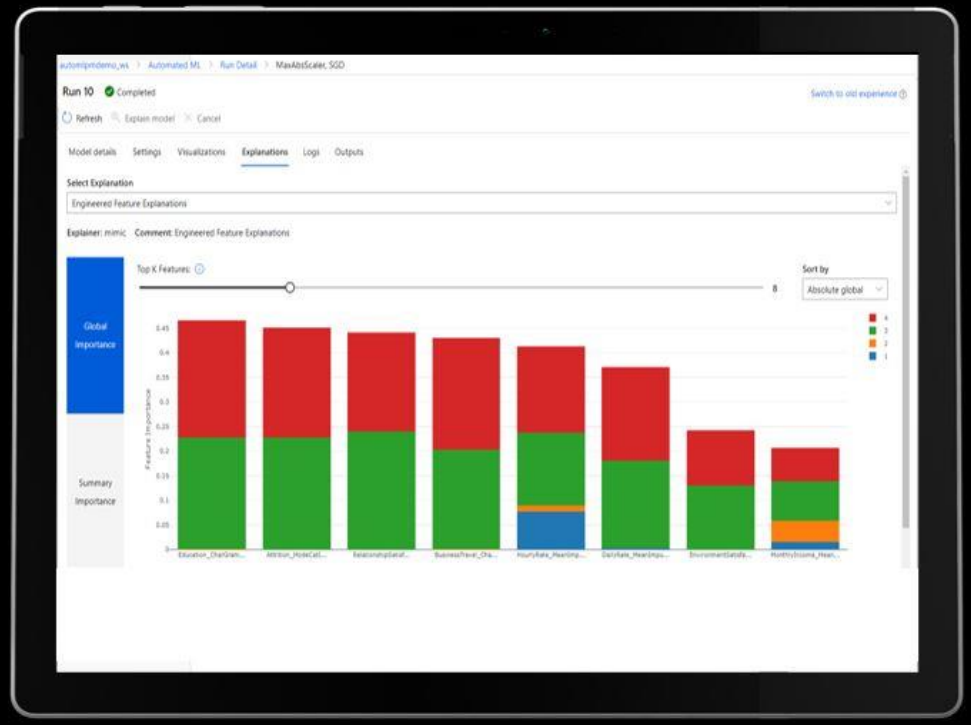
Protect

Differential privacy

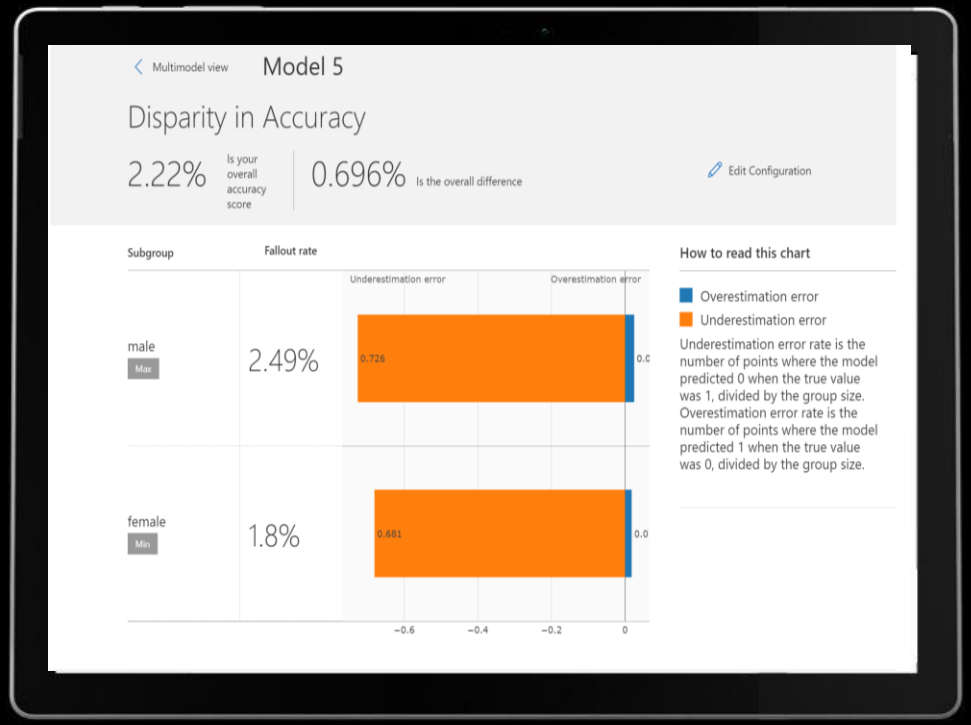
Confidential machine learning

Understand models

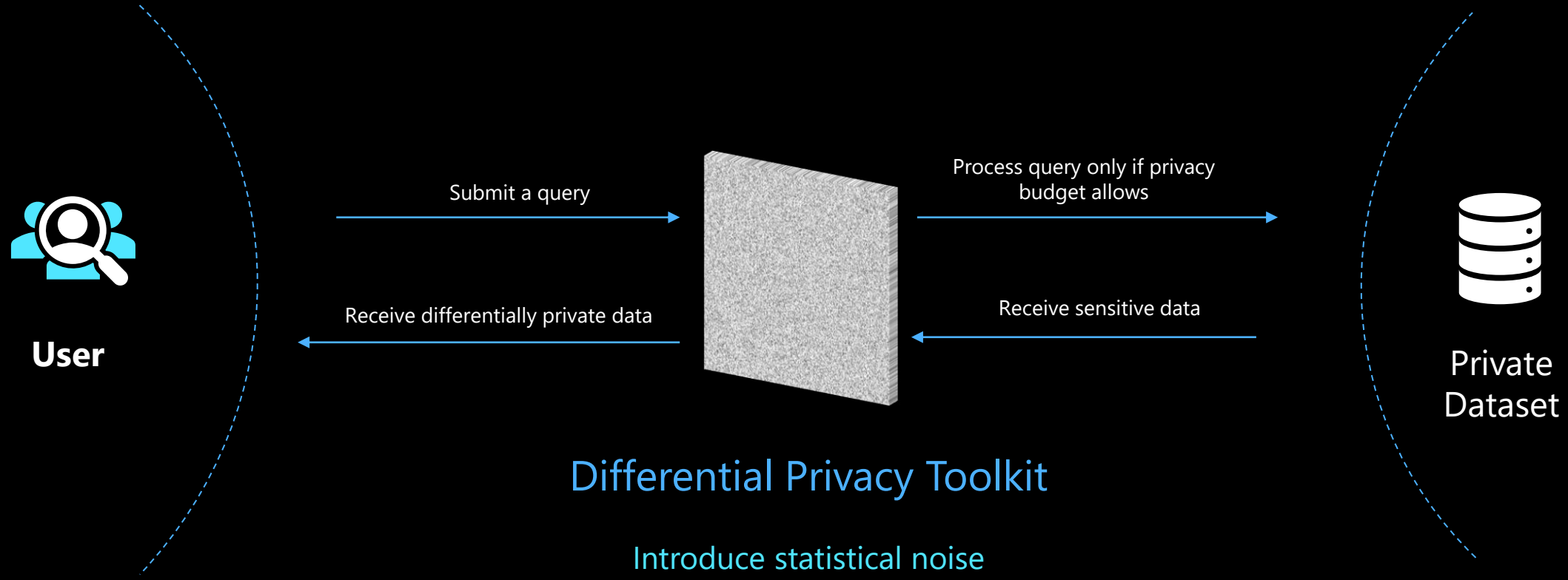
Model Interpretability



Fairness assessment and unfairness mitigation



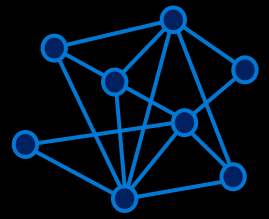
Protect data and models



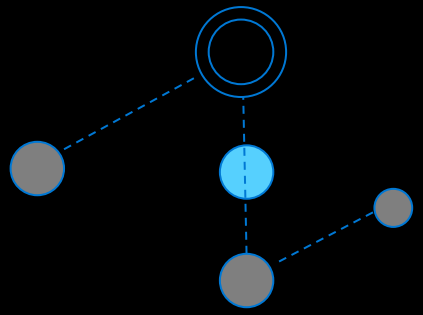
Differential Privacy Toolkit

Introduce statistical noise
Manage privacy budget

Control and manage the ML process



Model



Audit Trail

Track the end to end lineage and build audit trail

Datasheets

Documenting model metadata

Azure Machine Learning

ML for all skill levels

Full lifecycle management with MLOPs

State-of-the-art Responsible ML

Open & Interoperable

Familiar Data Science tools

Code in Python or R in a development environment of your choice

Visual Studio Code

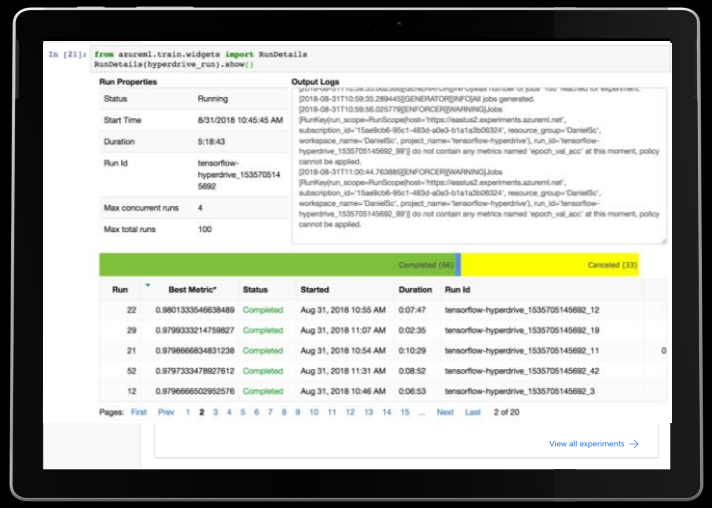
Jupyter

PyCharm

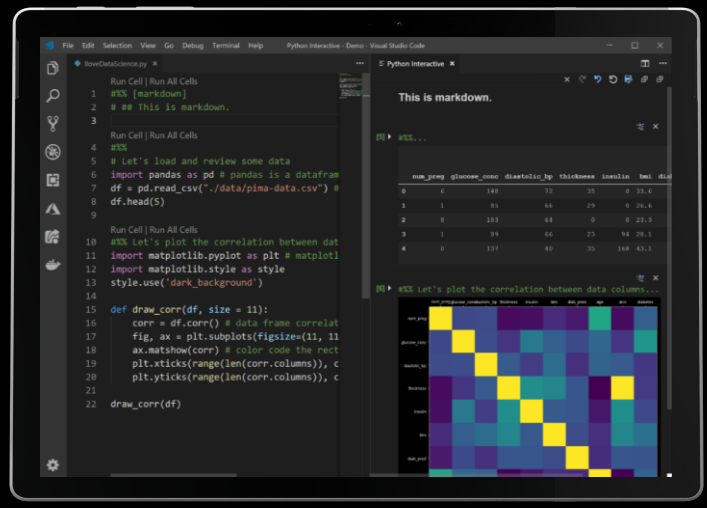
Zeppelin

Command line

Increase data science productivity

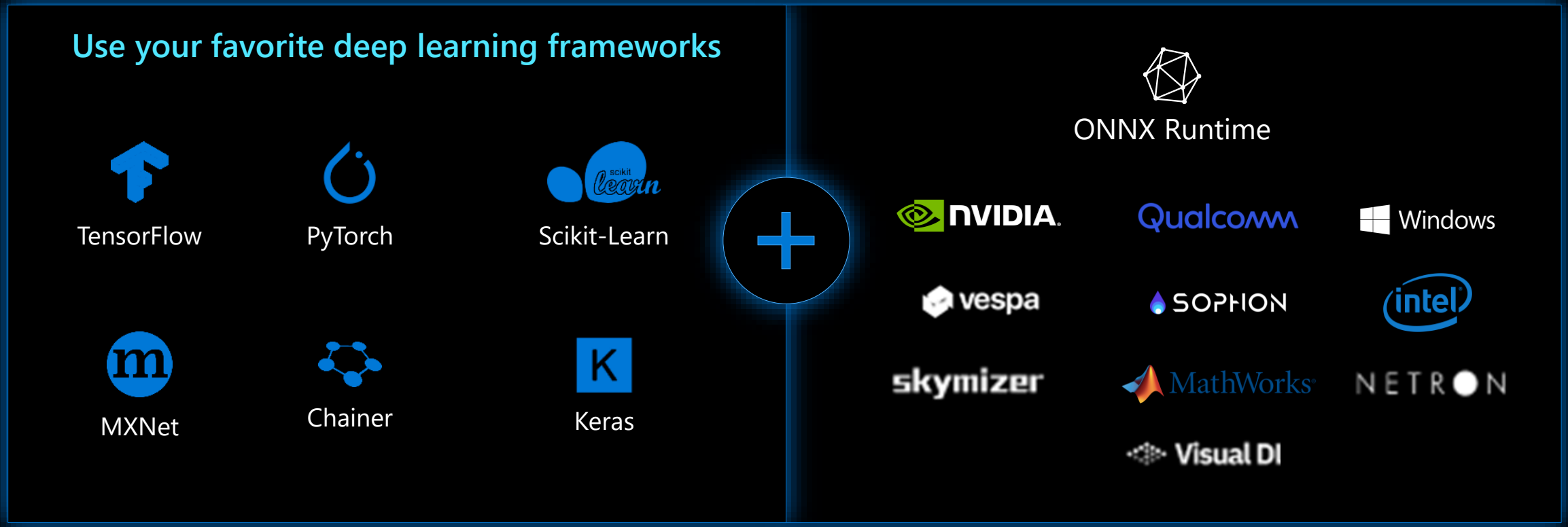


Interactive widgets for Jupyter Notebooks



Azure Machine Learning for Visual Studio Code extension

Powerful frameworks



Thank You! Questions?!

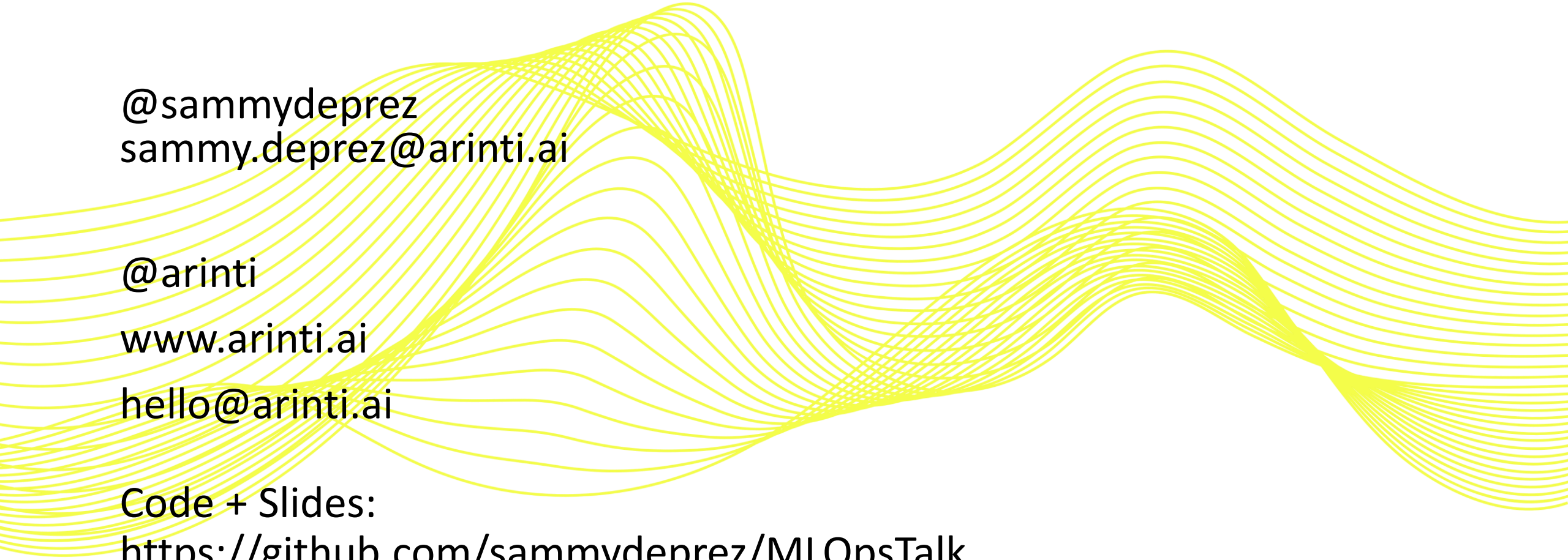
@sammydeprez
sammy.deprez@arinti.ai

@arinti

www.arinti.ai

hello@arinti.ai

Code + Slides:
https://github.com/sammydeprez/MLOpsTalk



arinti