

Leverage high-scale data with R language in Azure Databricks

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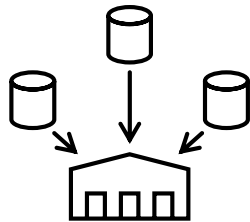
github.com/kritcs18

@kritcs18

How companies are transforming



Serving business users and end users with **intelligent** and **dynamic** applications



Build a unified and usable data pipeline



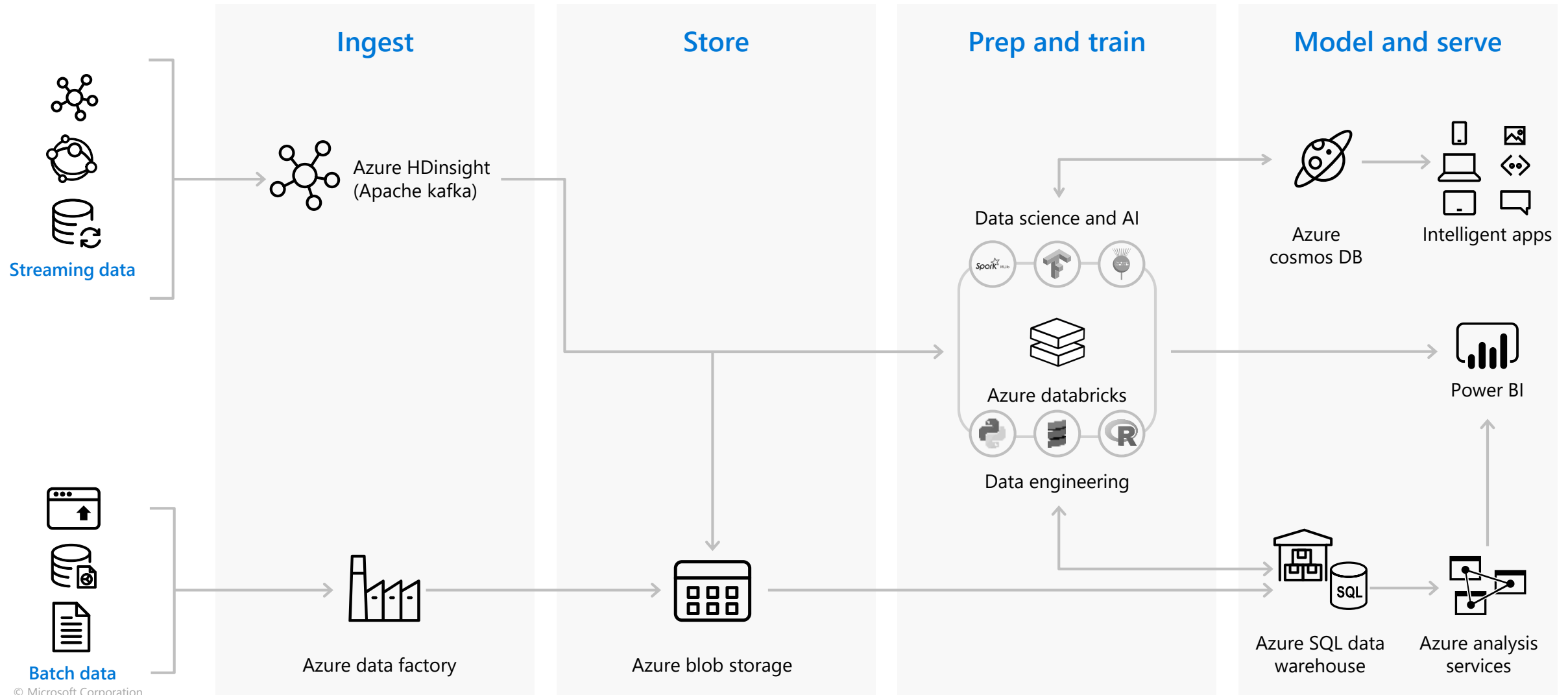
Train ML and DL models to derive insights



Operationalize models and distribute insights at scale

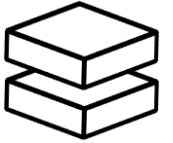
What approach should I take to overcome these challenges?

Microsoft has a recommended reference architecture



Introducing Azure Databricks

Fast, easy, and collaborative Apache Spark™-based analytics platform



Increase productivity



Build on a secure, trusted cloud



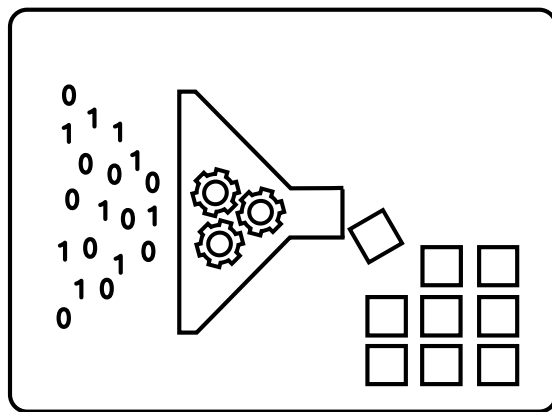
Scale without limits





Built with your needs in mind

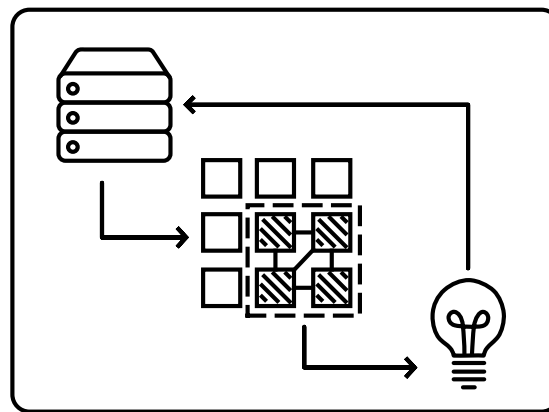
- Role-based access controls
- Effortless autoscaling
- Live collaboration
- Enterprise-grade SLAs
- Best-in-class notebooks
- Simple job scheduling

Prep and train




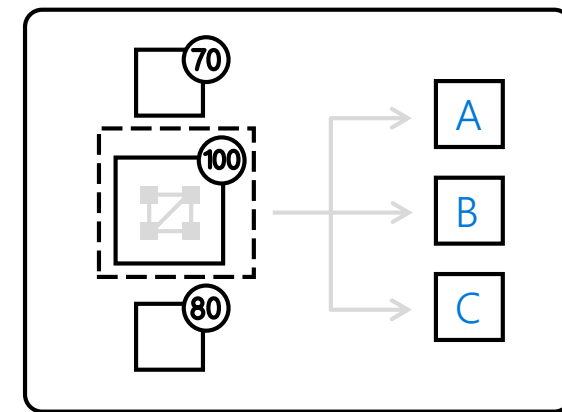
Collect and prepare data

 Azure data factory
 Azure databricks





Train and evaluate model

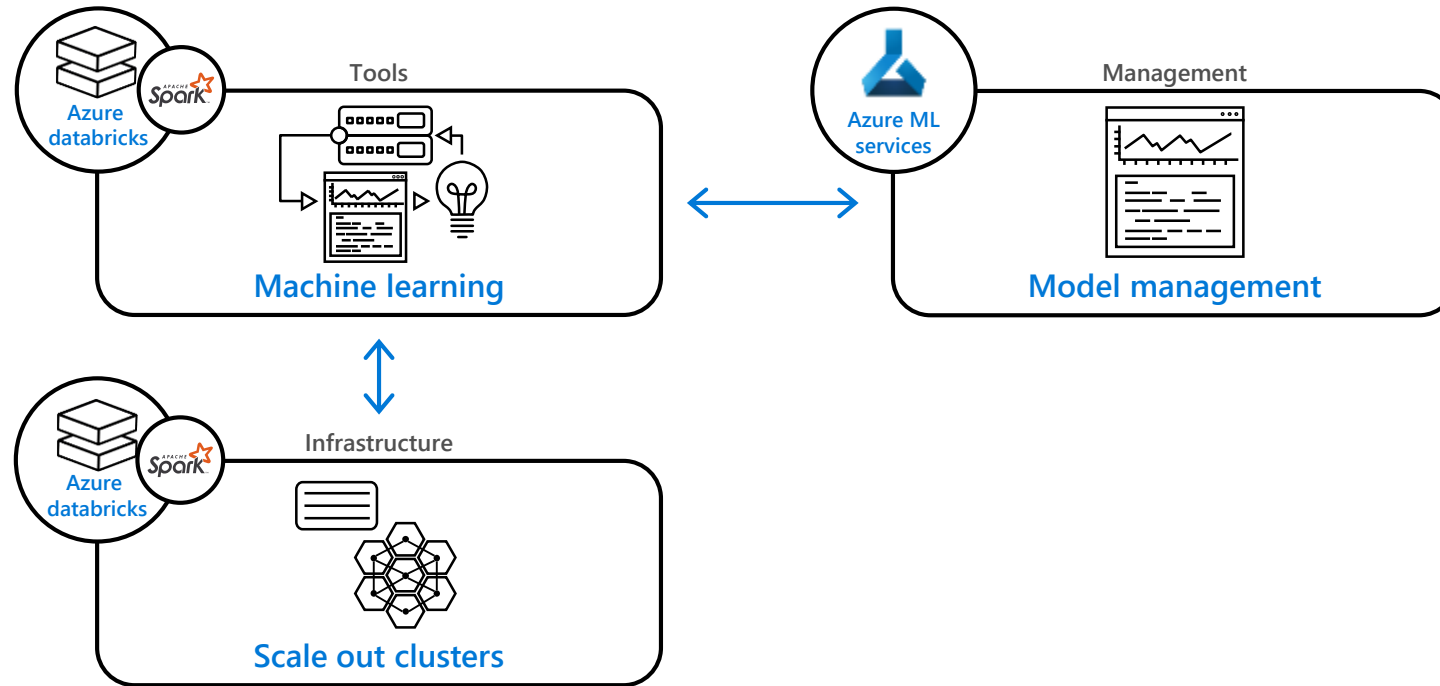
 Azure databricks



Operationalize and manage

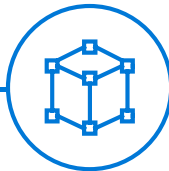
 Azure ML services
 Azure databricks

Train and evaluate Machine Learning models



Simplify model development

Collaborate in interactive workspaces
Access a library of battle-tested models
Automate job execution



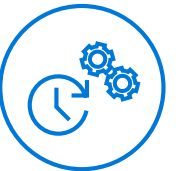
Scale compute resources to meet your needs

Easily scale up or scale out
Autoscale on a serverless infrastructure
Leverage commodity hardware

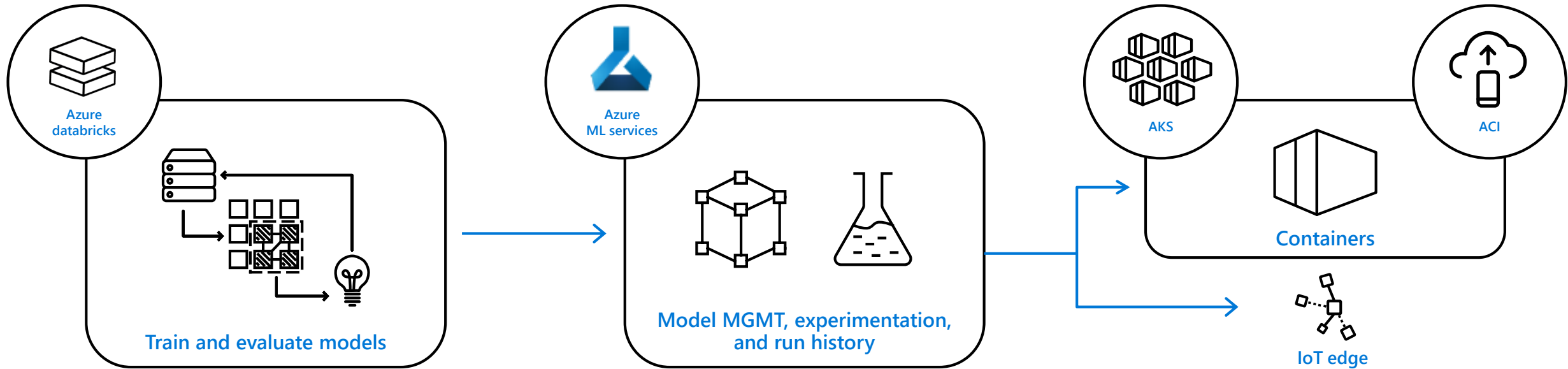


Quickly determine the right model for your data

Determine the best algorithm
Tune hyperparameters to optimize models
Rapidly prototype in agile environments

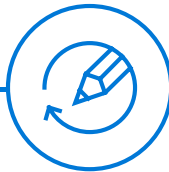


Operationalize and manage models with ease



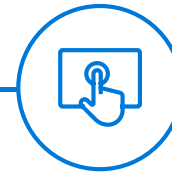
Bring models to life quickly

Build and deploy models in minutes
Iterate quickly on serverless infrastructure
Easily change environments



Proactively manage model performance

Identify and promote your best models
Capture model telemetry
Retrain models with APIs

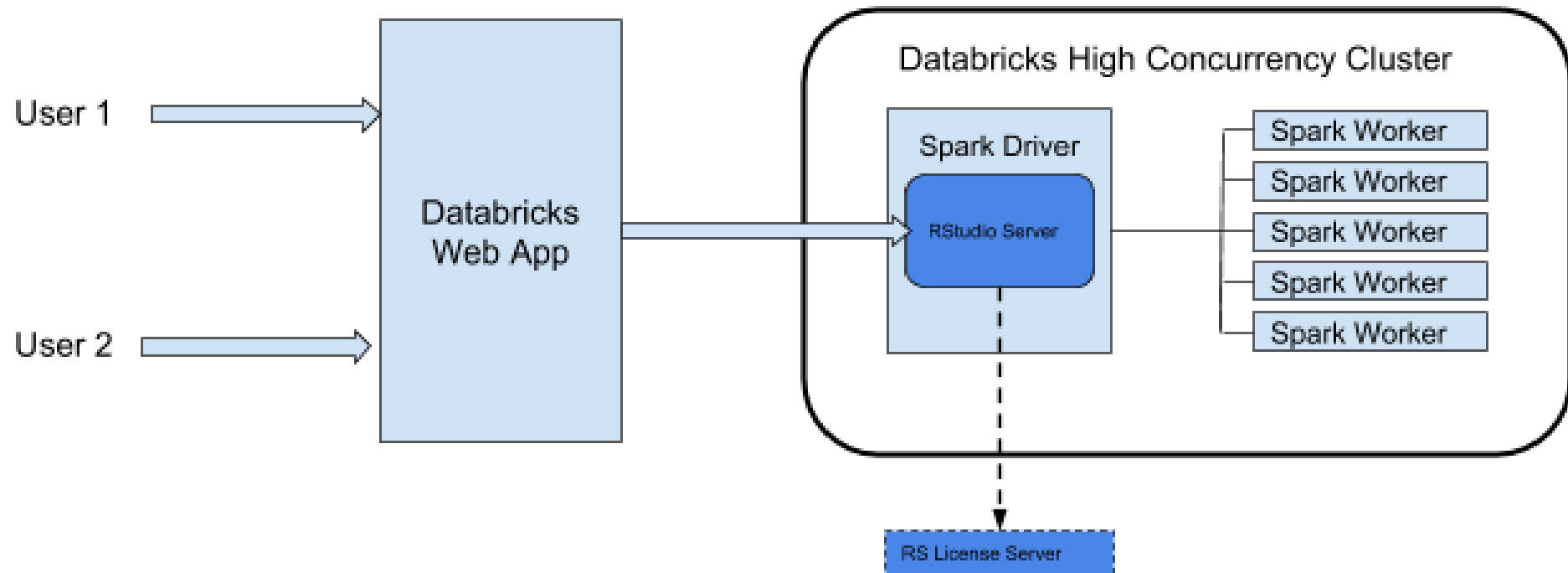


Deploy models closer to your data

Deploy models anywhere
Scale out to containers
Infuse intelligence into the IoT edge



RStudio on Azure Databricks



Get Started

Try Azure:

<https://azure.microsoft.com/en-us/free/>

Azure Databricks docs:

<https://docs.microsoft.com/en-us/azure/azure-databricks/>

SparkR on Databrick guide:

<https://docs.azuredatabricks.net/spark/latest/sparkr/index.html>

R developer's guide to Azure:

<https://docs.microsoft.com/en-us/azure/machine-learning/r-developers-guide>

