

Diplomado en ML Cloud - UCB CBBA

Módulo 4: Machine Learning Cloud MLOps

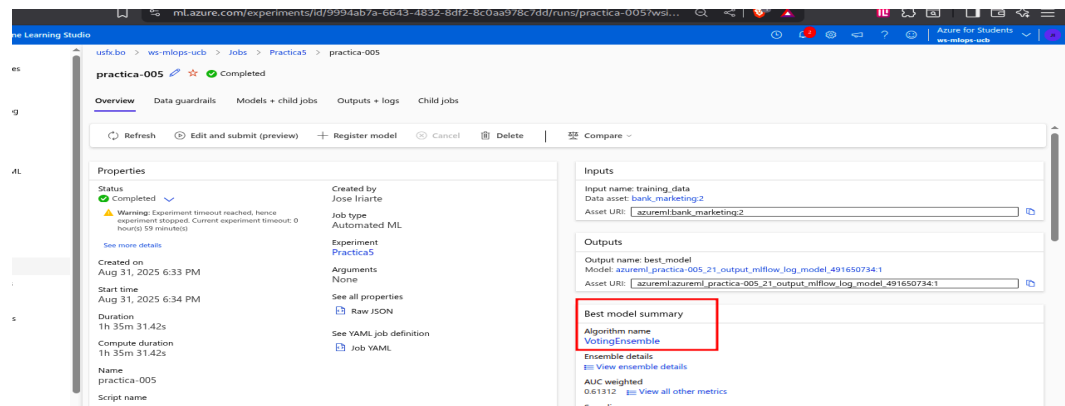
Docente: Ing. Mauricio Alejandro Quezada

Estudiante: Jose Carlos Iriarte

Fecha : Agosto del 2025

Laboratorio 6

Resultados



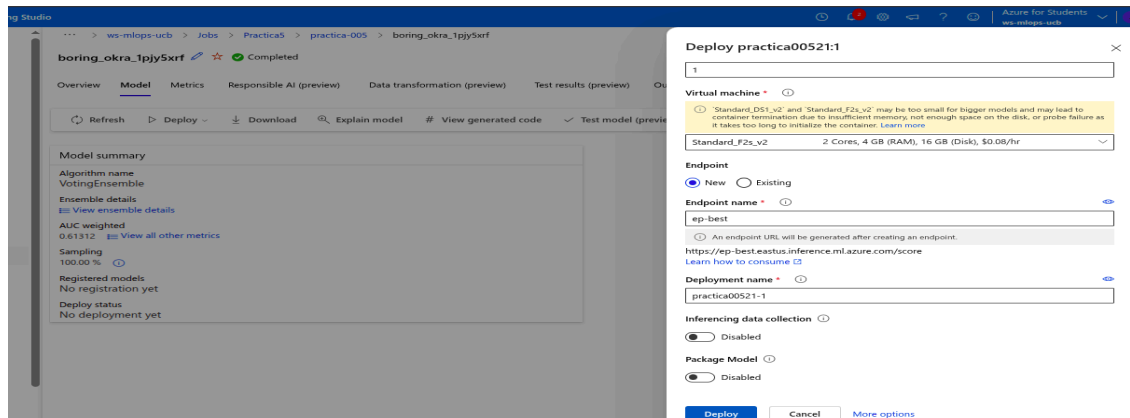
Resultados del mejor modelo

Tabla comparativa con al menos 4 modelos

Algorithm name	Responsible AI	AUC weighted	Sampling	Created on	Duration	Hyperparameter
VotingEnsemble		0.61312	100.00 %	Aug 31, 2025 7:42 PM	27m 11s	algorithm : ExtremeRandomTree...
StandardScalerWrapper, ExtremeRandomTrees		0.60193	100.00 %	Aug 31, 2025 6:42 PM	1m 51s	bootstrap : class_weight : crit...
MaxAbsScaler, ExtremeRandomTrees		0.59716	100.00 %	Aug 31, 2025 6:42 PM	2m 20s	bootstrap : class_weight : balan...
MaxAbsScaler, ExtremeRandomTrees		0.59533	100.00 %	Aug 31, 2025 6:42 PM	2m 0s	bootstrap : class_weight : crit...
StandardScalerWrapper, ExtremeRandomTrees		0.58862	100.00 %	Aug 31, 2025 6:42 PM	2m 16s	bootstrap : class_weight : balan...
StandardScalerWrapper, LightGBM		0.58416	100.00 %	Aug 31, 2025 6:42 PM	2m 44s	boosting_type : gbdtr : colsamp...
MaxAbsScaler, ExtremeRandomTrees		0.58329	100.00 %	Aug 31, 2025 6:42 PM	1m 50s	bootstrap : class_weight : crit...
SparseNormalizer, RandomForest		0.57412	100.00 %	Aug 31, 2025 6:42 PM	2m 54s	bootstrap : true : class_weight :
MaxAbsScaler, LogisticRegression		0.57367	100.00 %	Aug 31, 2025 7:39 PM	2m 26s	C : 10000 : class_weight : multi...

El mejor modelo fue VotingEnsemble

Endpoints para los 4 mejores modelos



Machine Learning Studio

usfx.bo > ws-mlops-ucb > Endpoints

Endpoints

Real-time endpoints Batch endpoints Azure OpenAI Serverless endpoints

+ Create Refresh Delete Reset view

Name	Description	Quota type	Created on	Created by	Updated on	Compute type	Compute target
banking-ep-best		Dedicated	Aug 31, 2025 9:27 PM	Jose Iriarte	Aug 31, 2025 9:27 PM	Managed	
banking-ep-second		Dedicated	Aug 31, 2025 9:30 PM	Jose Iriarte	Aug 31, 2025 9:30 PM	Managed	
banking-ep-mid		Dedicated	Aug 31, 2025 9:32 PM	Jose Iriarte	Aug 31, 2025 9:32 PM	Managed	
banking-ep-low		Dedicated	Aug 31, 2025 9:33 PM	Jose Iriarte	Aug 31, 2025 9:33 PM	Managed	

Azure AI | Machine Learning Studio

usfx.bo > ws-mlops-ucb > Endpoints > banking-ep-second

banking-ep-second

Details Test Consume Monitoring PREVIEW Logs

Basic consumption info

REST endpoint

<https://banking-ep-second.eastus.inference.ml.azure.com/score>

Authentication

Primary key

Secondary key

Regenerate

Consumption option

Machine Learning Studio

usfx.bo > ws-mlops-ucb > Endpoints > banking-ep-best

banking-ep-best

Details Test Consume Monitoring PREVIEW Logs

+ Add deployment Refresh Update traffic Delete

Endpoint attributes

Service ID

banking-ep-best

Description

Provisioning state

Succeeded

Error details

Compute type

Managed

Created by

Jose Iriarte

Deployment summary

Live traffic allocation

practica00521-1 (100%)

Mirrored traffic allocation

Deployment practica00521-1

Name

practica00521-1

Live traffic

100%

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usfx.bo > ws-mlops-ucb > Endpoints > banking-ep-second

banking-ep-second

Details Test Consume Monitoring PREVIEW Logs

Basic consumption info

REST endpoint

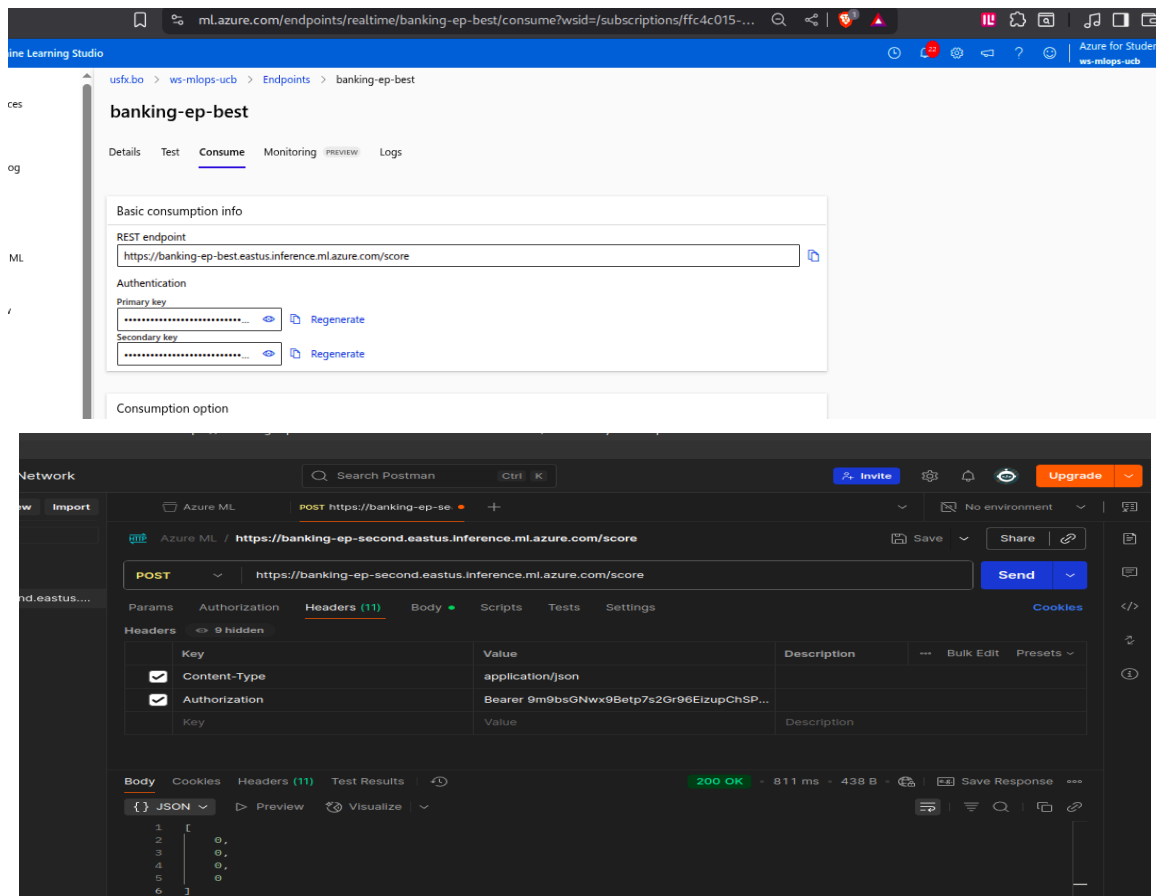
<https://banking-ep-second.eastus.inference.ml.azure.com/score>

Authentication

Primary key

Secondary key

Regenerate



Reflexiones:

- Ventajas de AutoML: rapidez en probar múltiples algoritmos, combinación de modelos y comparación objetiva con métricas estandarizadas.
- Limitaciones: no se ajusta automáticamente según el contexto del negocio (ej. priorizar Recall), y ofrece menos control fino en sampling, feature engineering y optimización específica.

Conclusiones

AutoML eligió bien con base en AUC. Sin embargo, para un caso bancario, conviene replantear la métrica objetivo hacia Recall o F1, pues es más crítico detectar correctamente los clientes que sí aceptarían el depósito