

2025 Mix-UP Datathon

:

**Steel Steal**

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# About Us 팀원 소개

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ToBig's 23



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## Track 2



(OK)

(NG)

(OK), (NG)

Final Score =

$$(0.4 \cdot \text{F1} + 0.6 \cdot \text{ROC-AUC})^2$$

Python

1.

# Kaggle Private Score

2	Mixup_Steel Steal		<div style="border: 2px solid red; padding: 2px;">1.000000</div>	7	4h
 Your Best Entry! Your most recent submission scored 1.000000, which is the same as your previous score. Keep trying!					

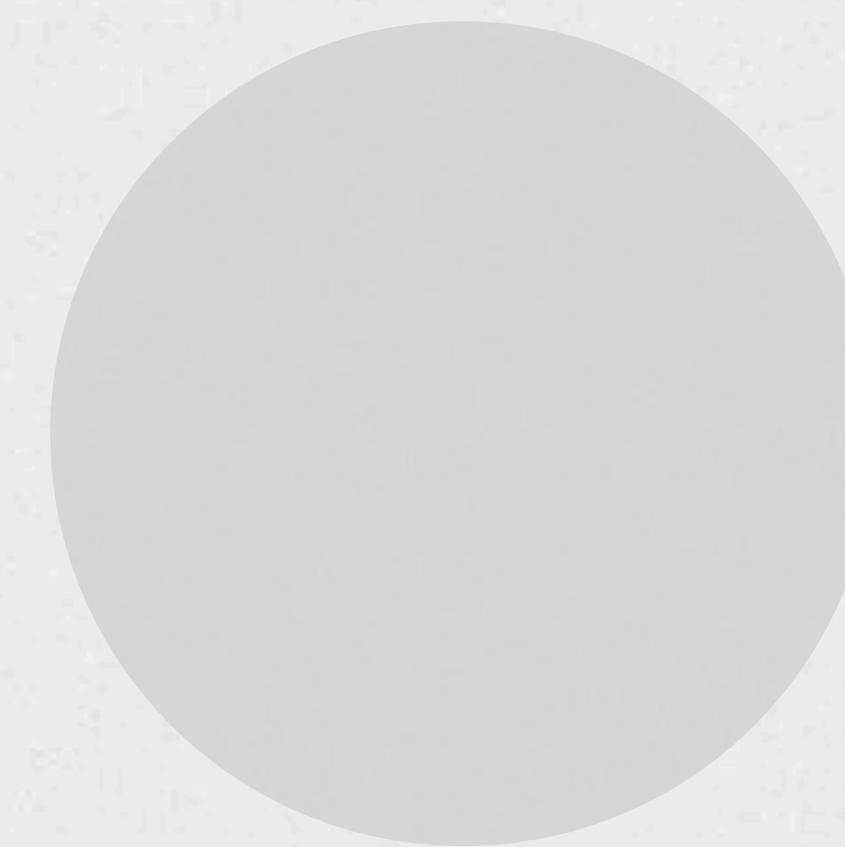
# Score 1.0

1.

# Kaggle Public Score



## Public Score 1.0

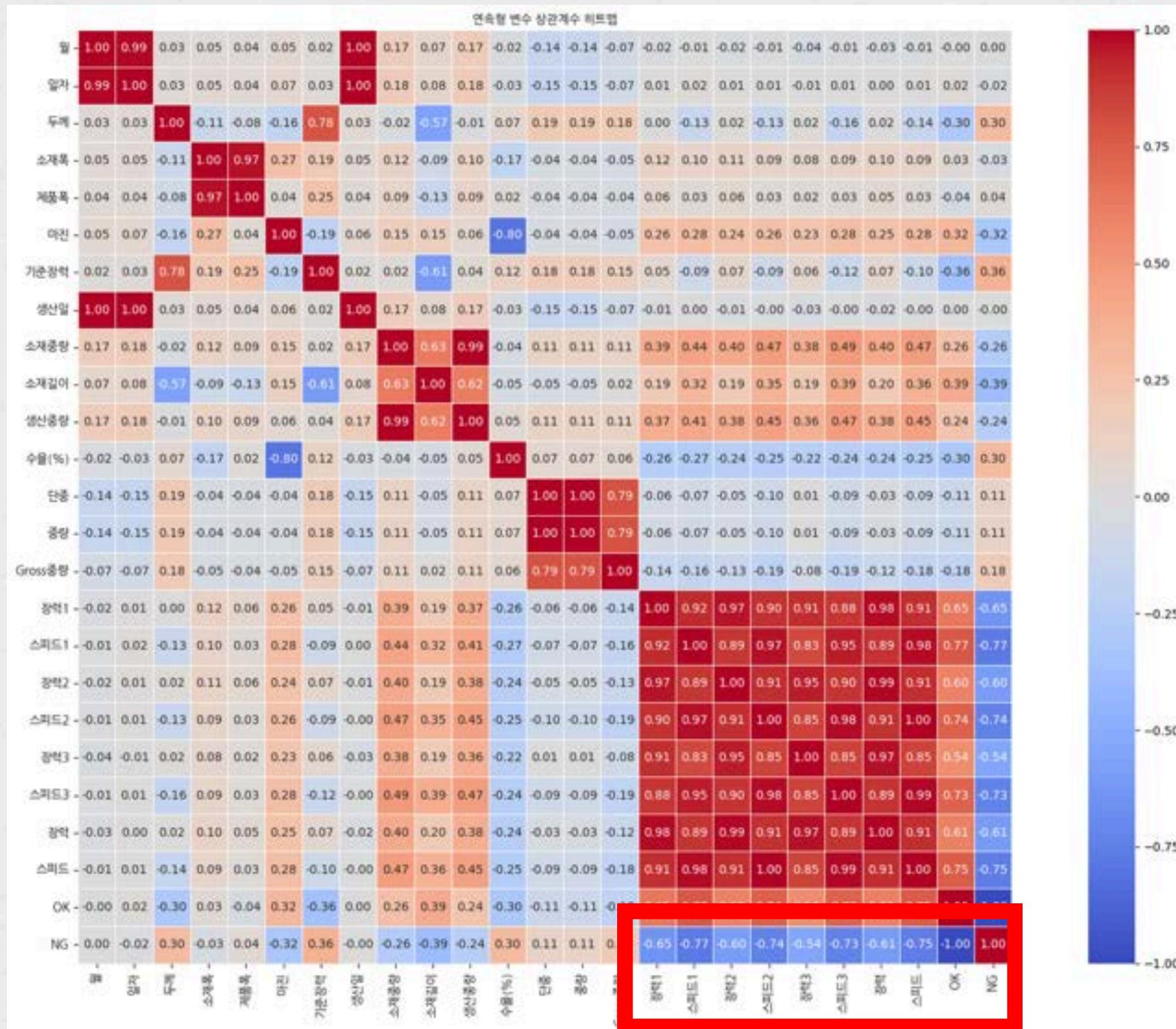


No., , , , ,  
, , , , → Unknown

( ) , , → 0

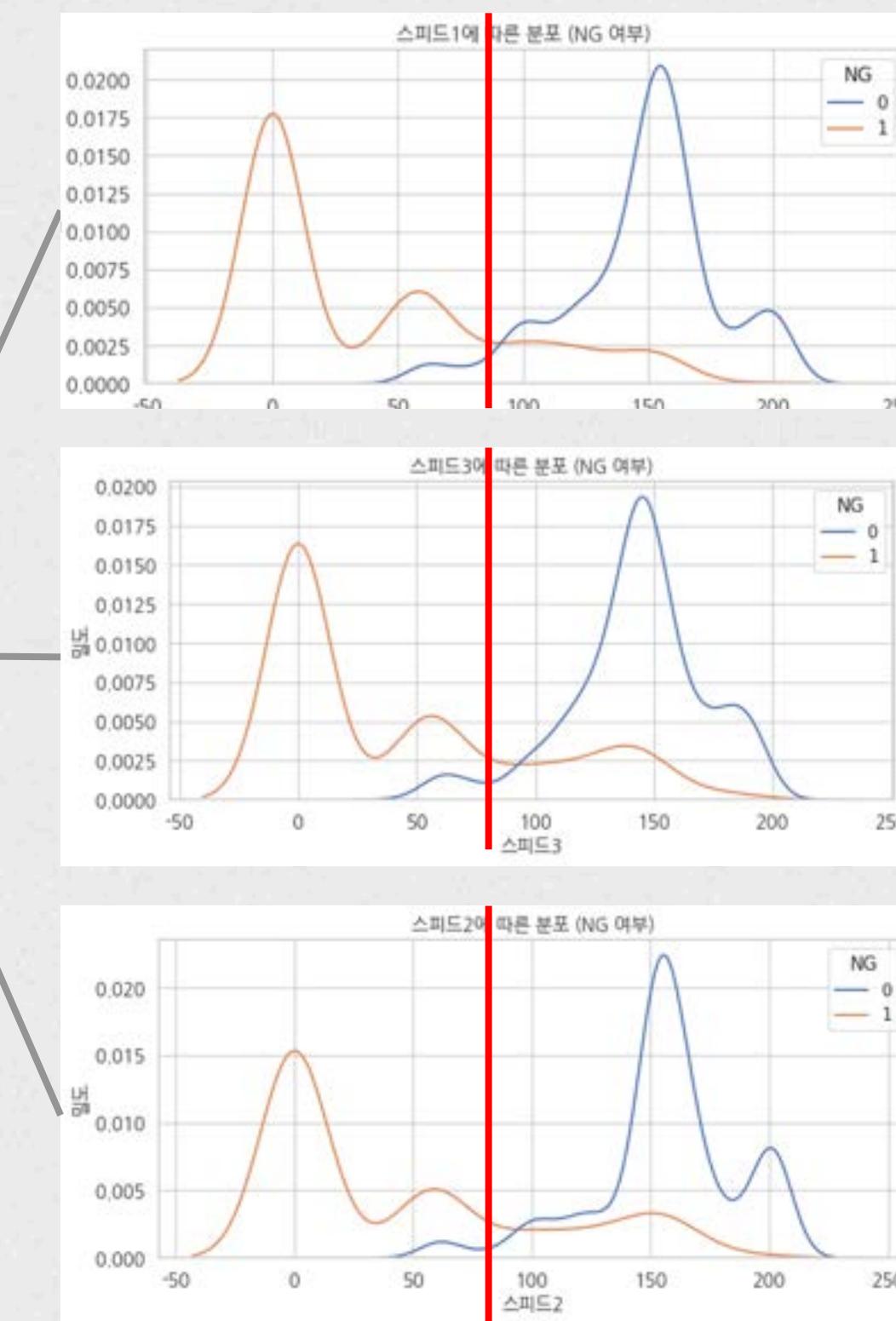
14

## 2. EDA:



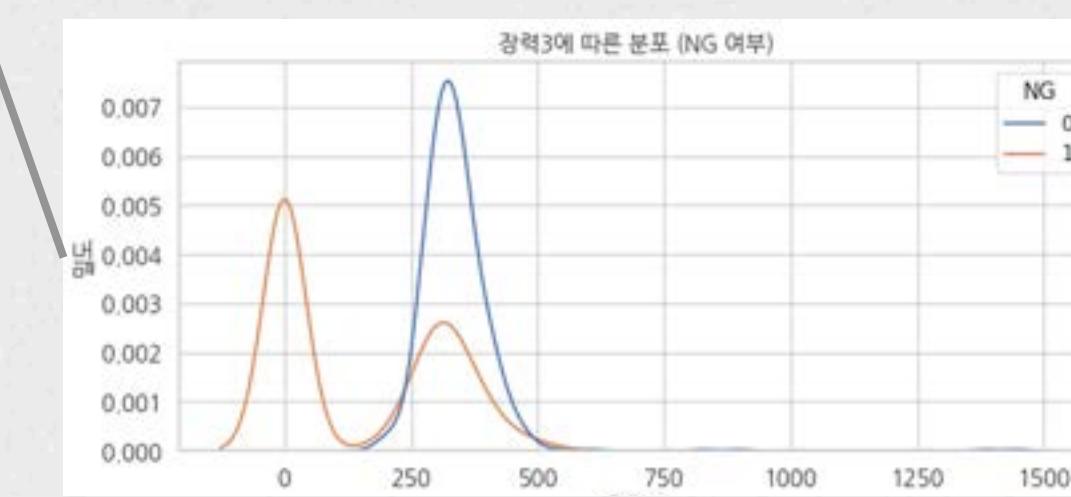
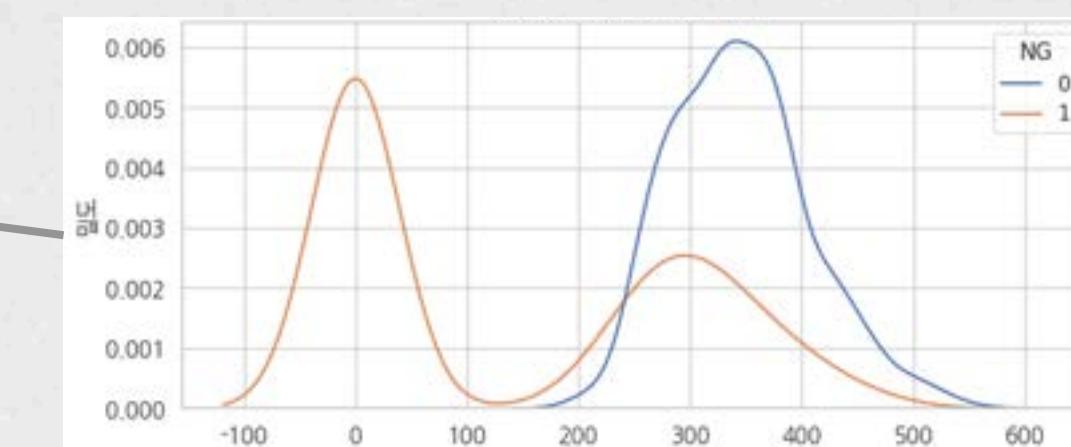
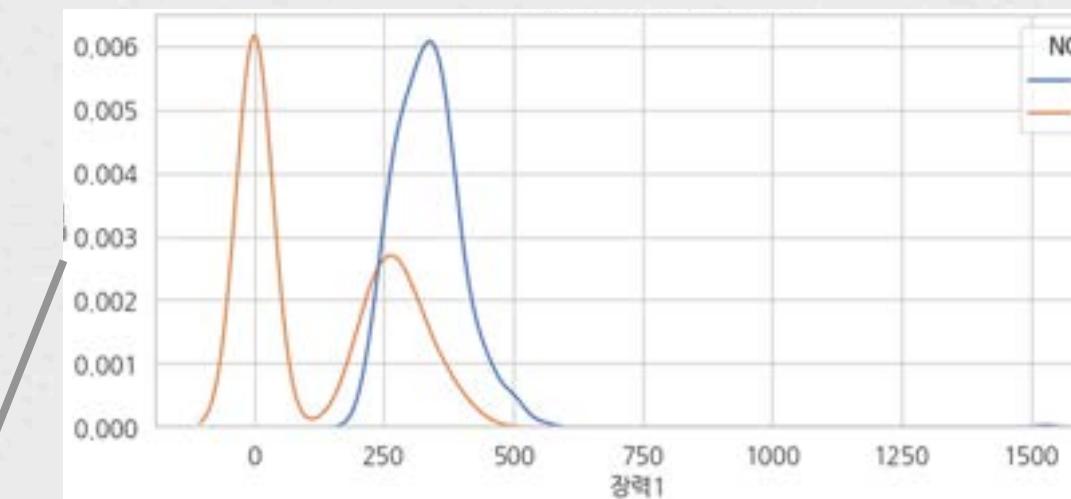
‘NG’

- 1 -0.77
- 2 -0.74
- 3 -0.73
- 1 -0.65
- 2 -0.60
- 3 -0.54



1, 2, 3  
90-98

NG  
(50 )



OK/NG

1

10



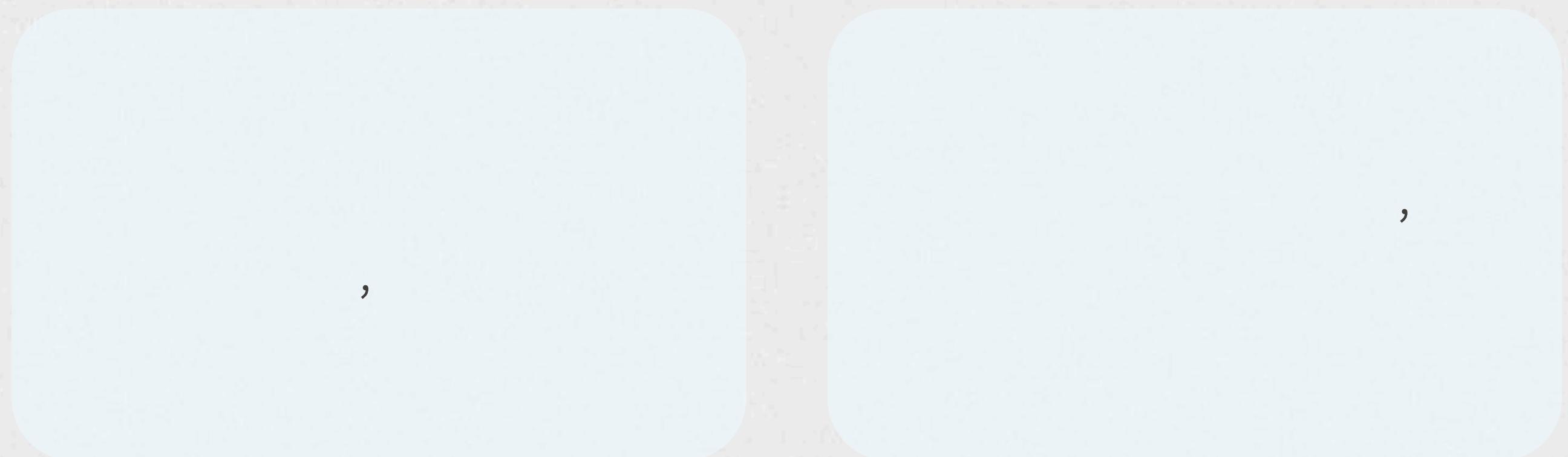
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LightGBM

CatBoost

1.0



XGBoost

LightGBM

LGBM

## Stratified KFold

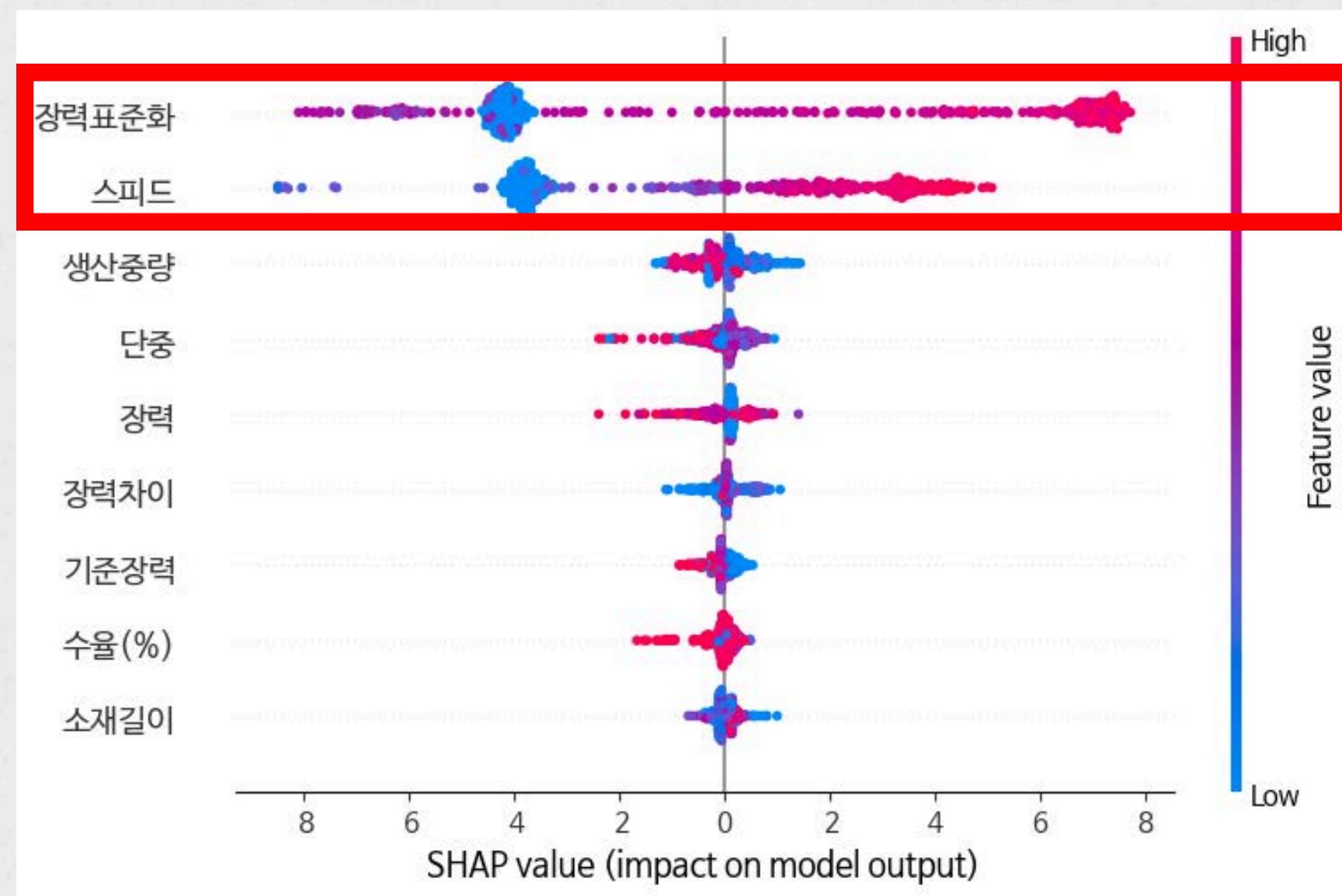
( :1,840 )

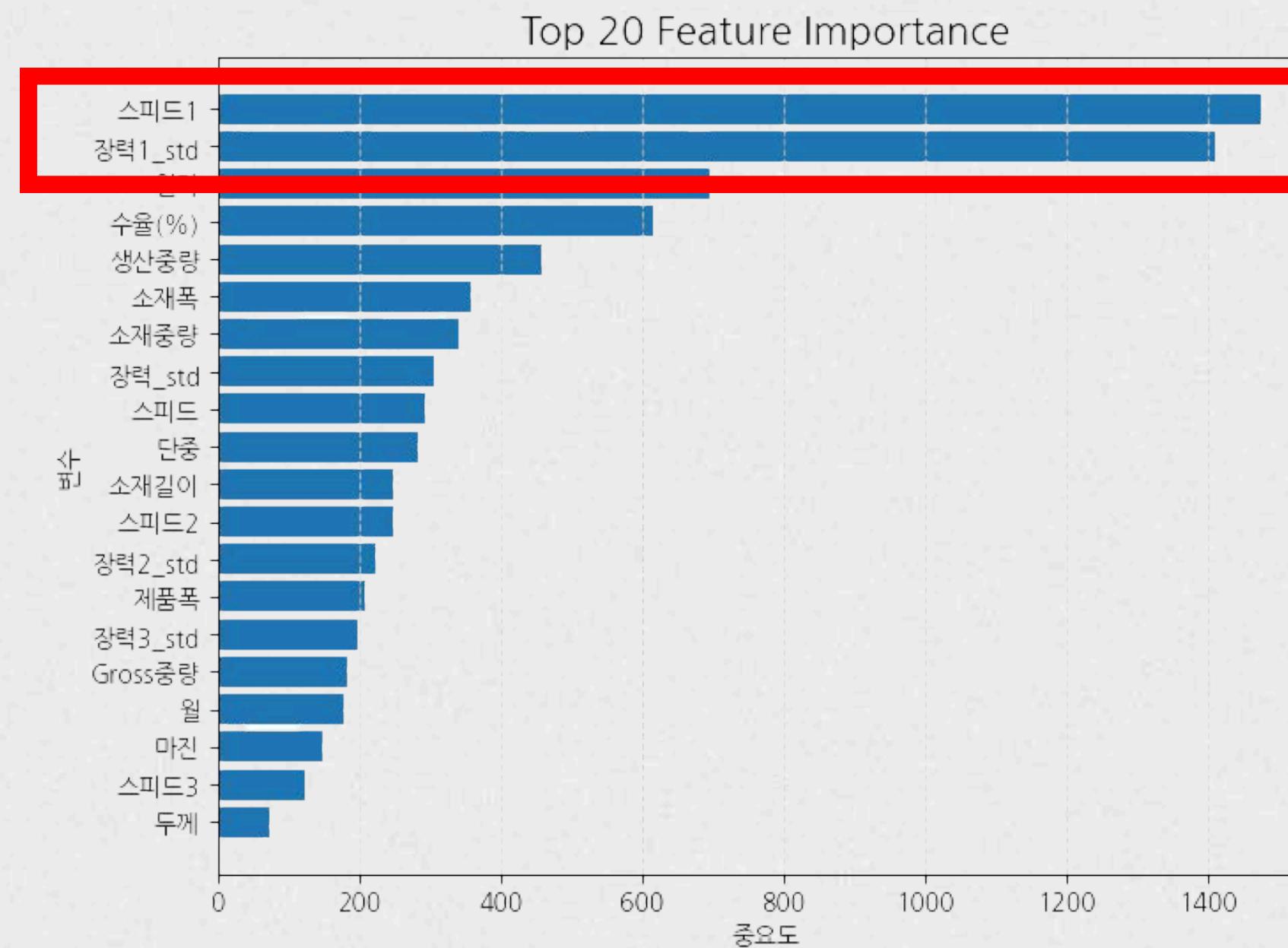
( Fold )

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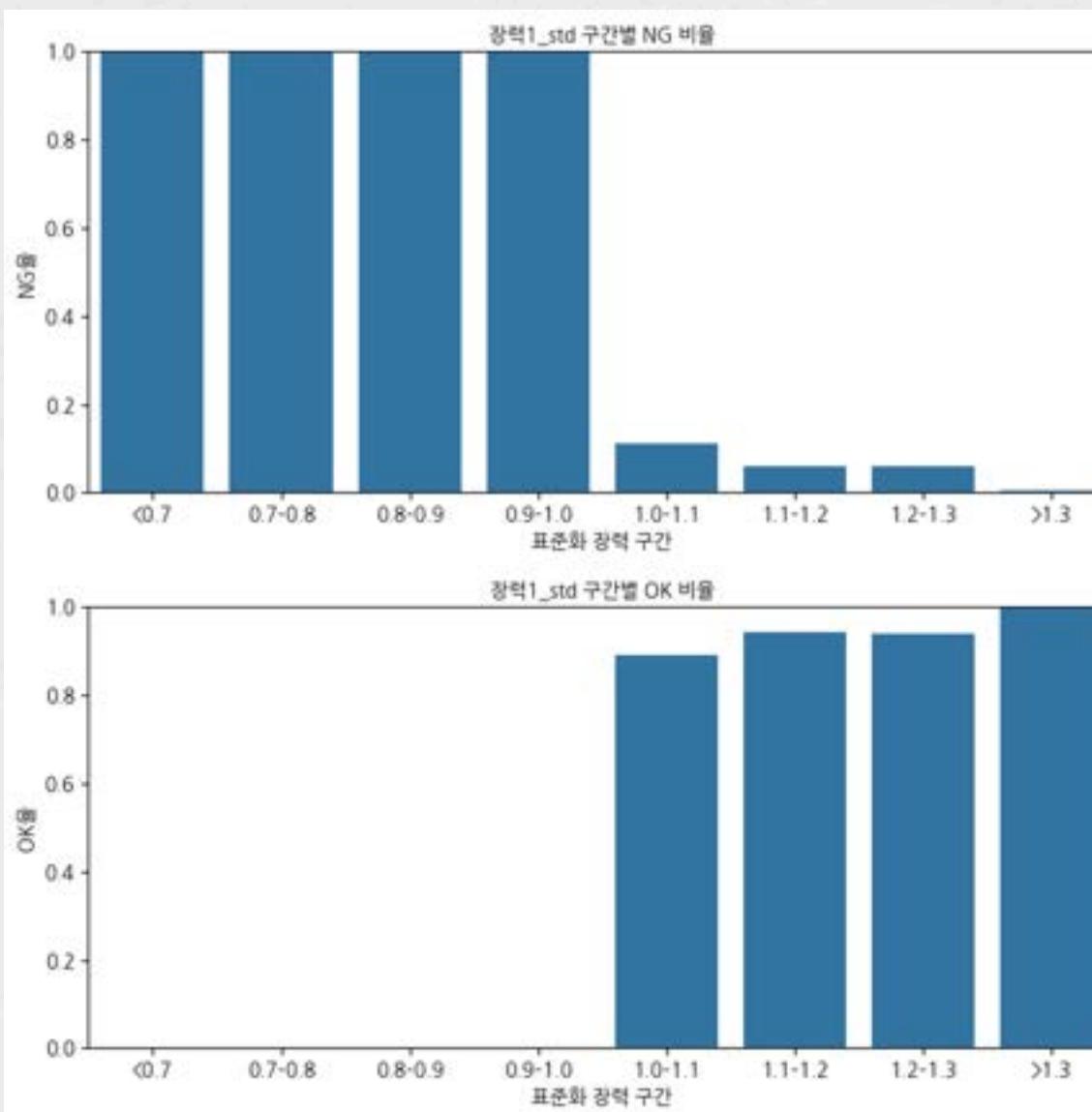
	F1	ROC-AUC	Final Score
+	0.9866	0.9994	0.9886
( )	1.0000	1.0000	1.0000
+	1.0000	1.0000	1.0000

- SHAP





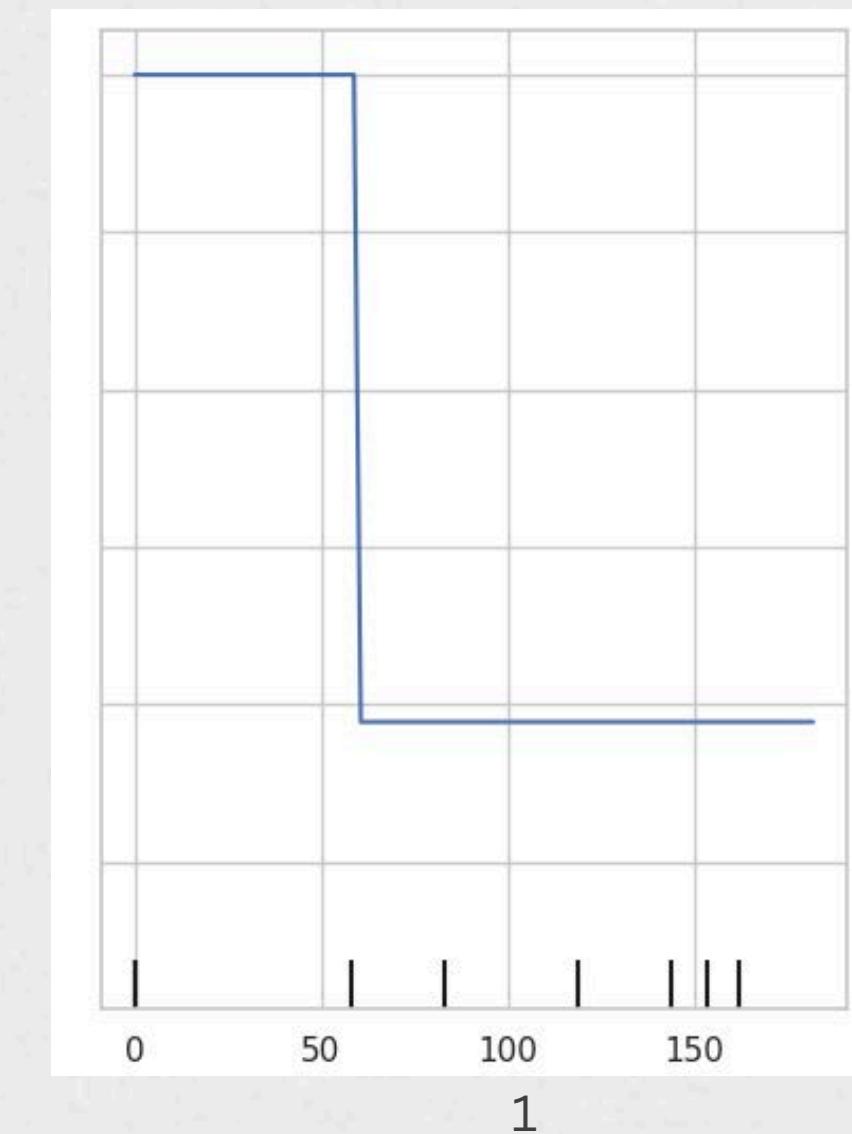
- 1\_std NG



1 1.0

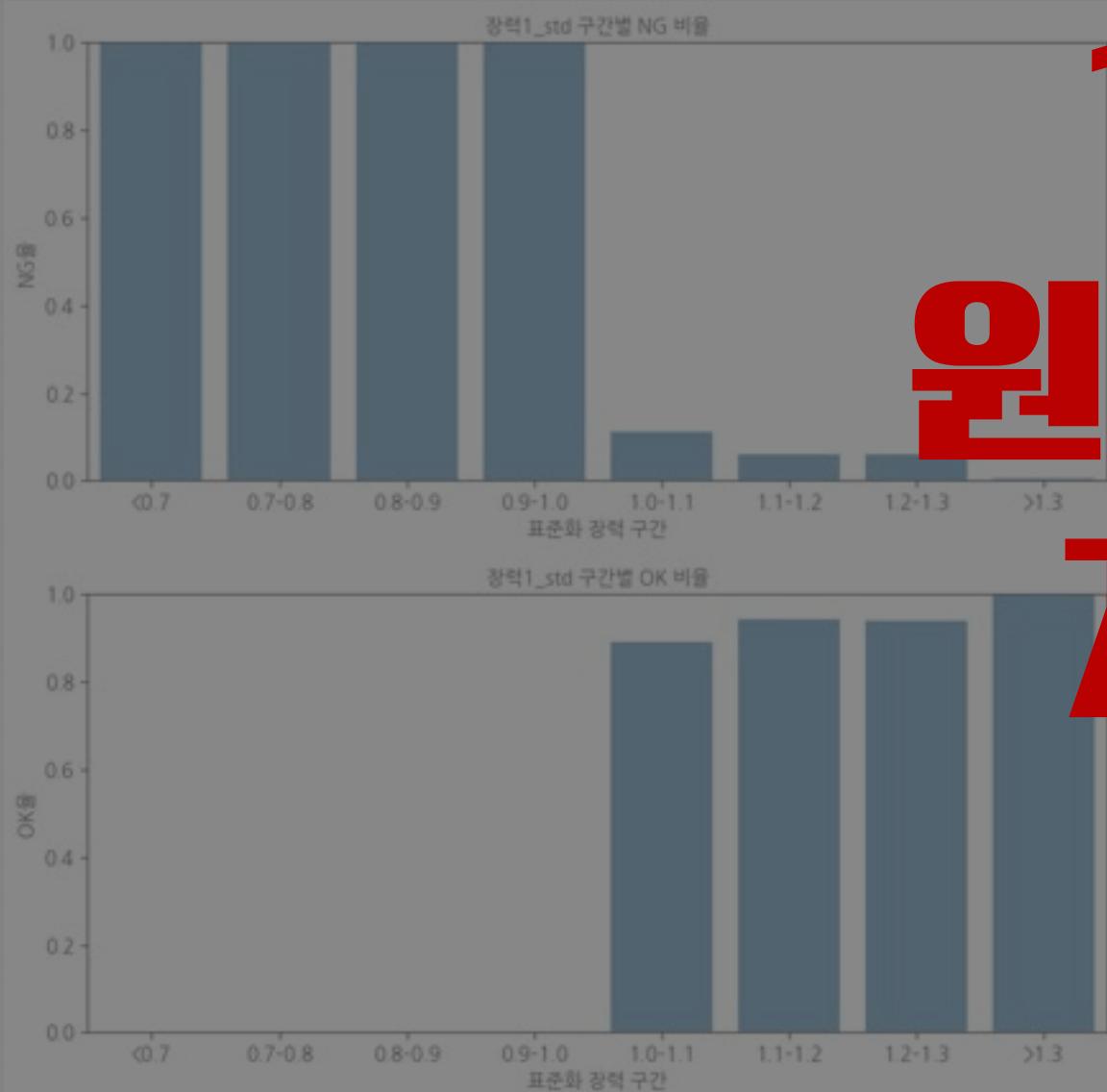
NG

- 1 PDP



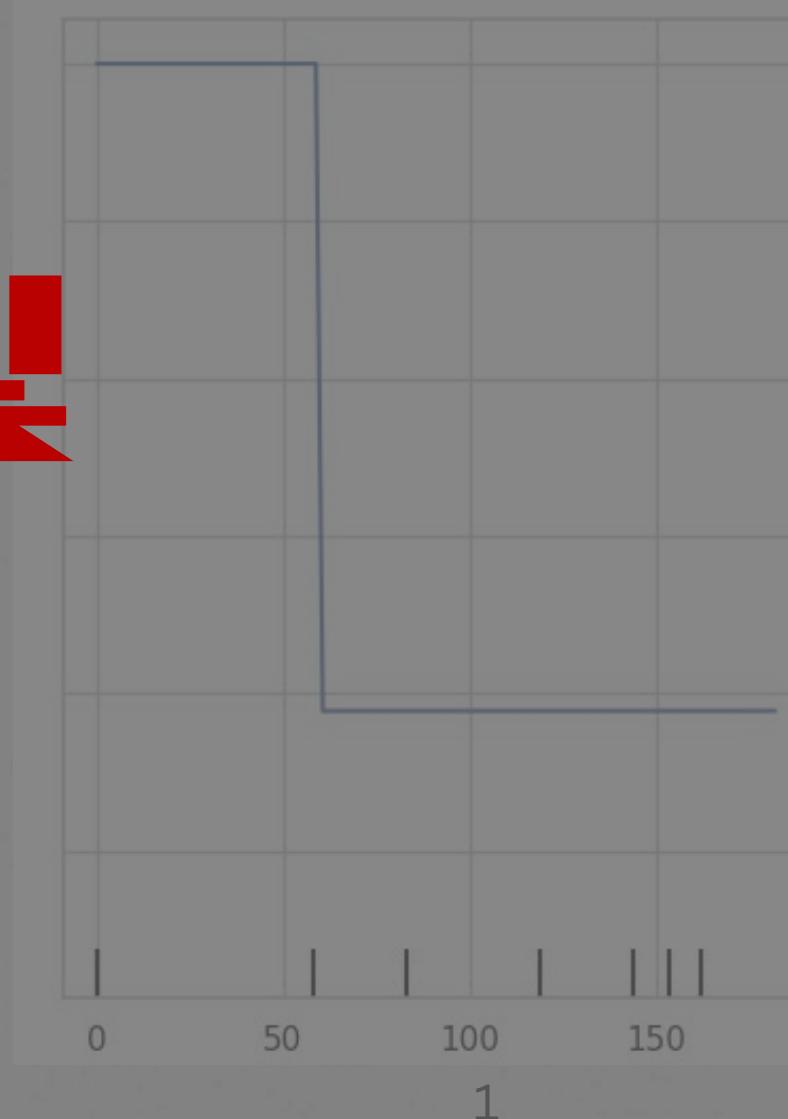
1 60 NG

● 1\_std NG



# 1번 공정 원인 파악 및 개선 필요

● 1 PDP



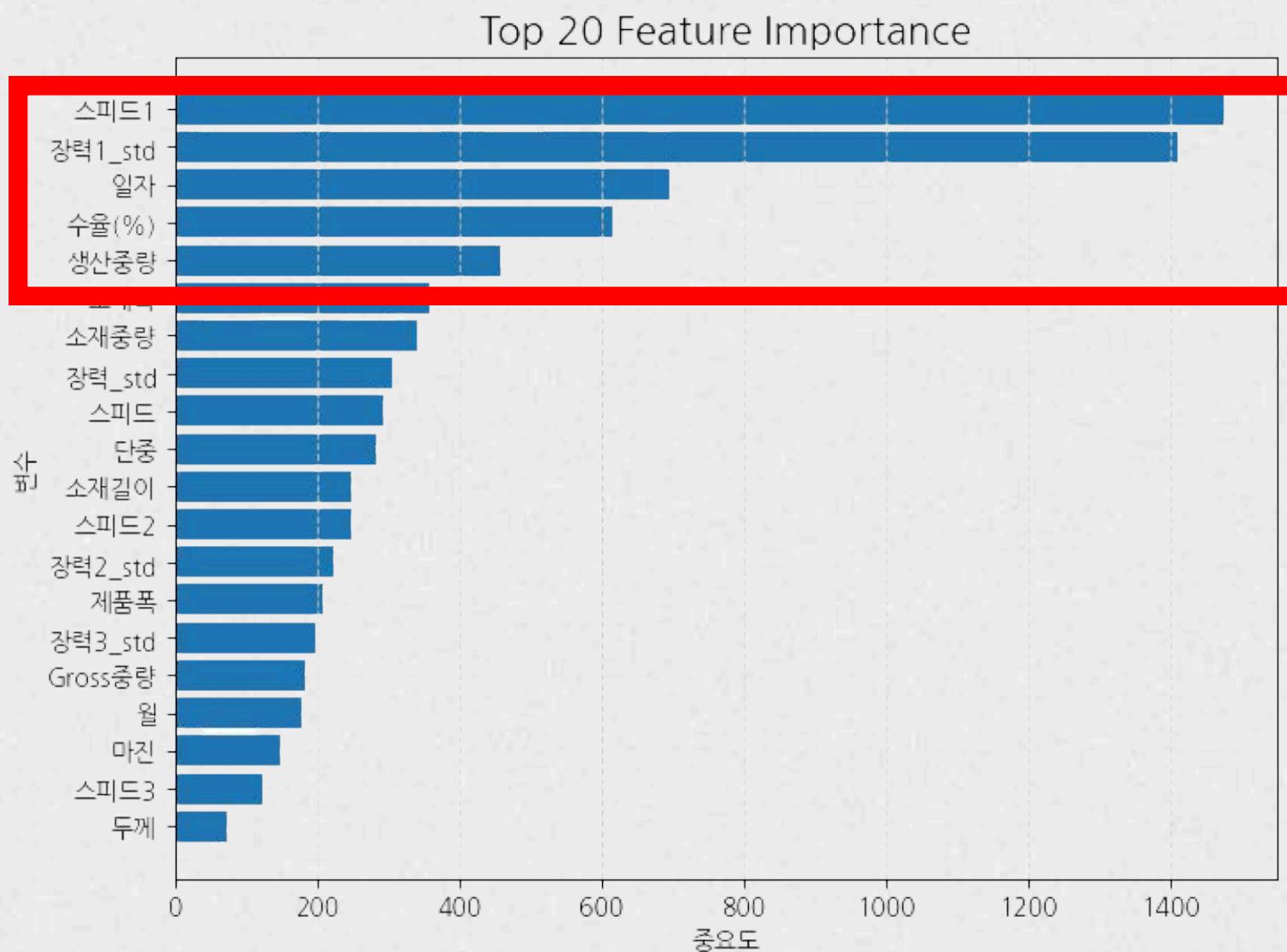
1 1.0

NG

1 60

NG

NG



NG

1,

1\_std,

(%),

,

Top5

(NG)

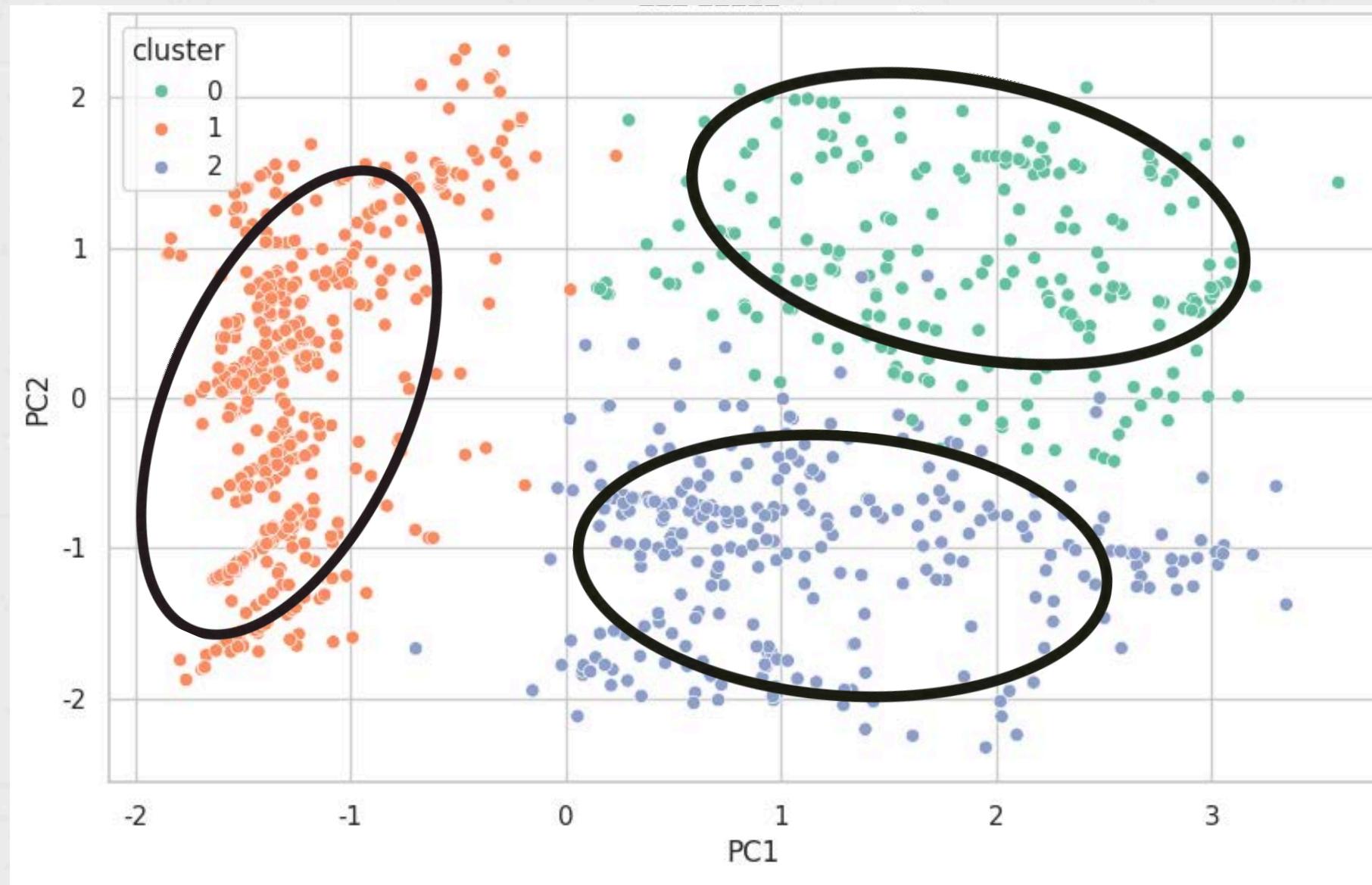
KMeans

(3 )

NG

:

NG



	1 ( )		1
Cluster 0	0.8130	98.2581	
Cluster 1	0.0032	0.1111	
Cluster 2	0.8224	77.9517	

NG

**Cluster 0**

+

**Cluster 1**

OR

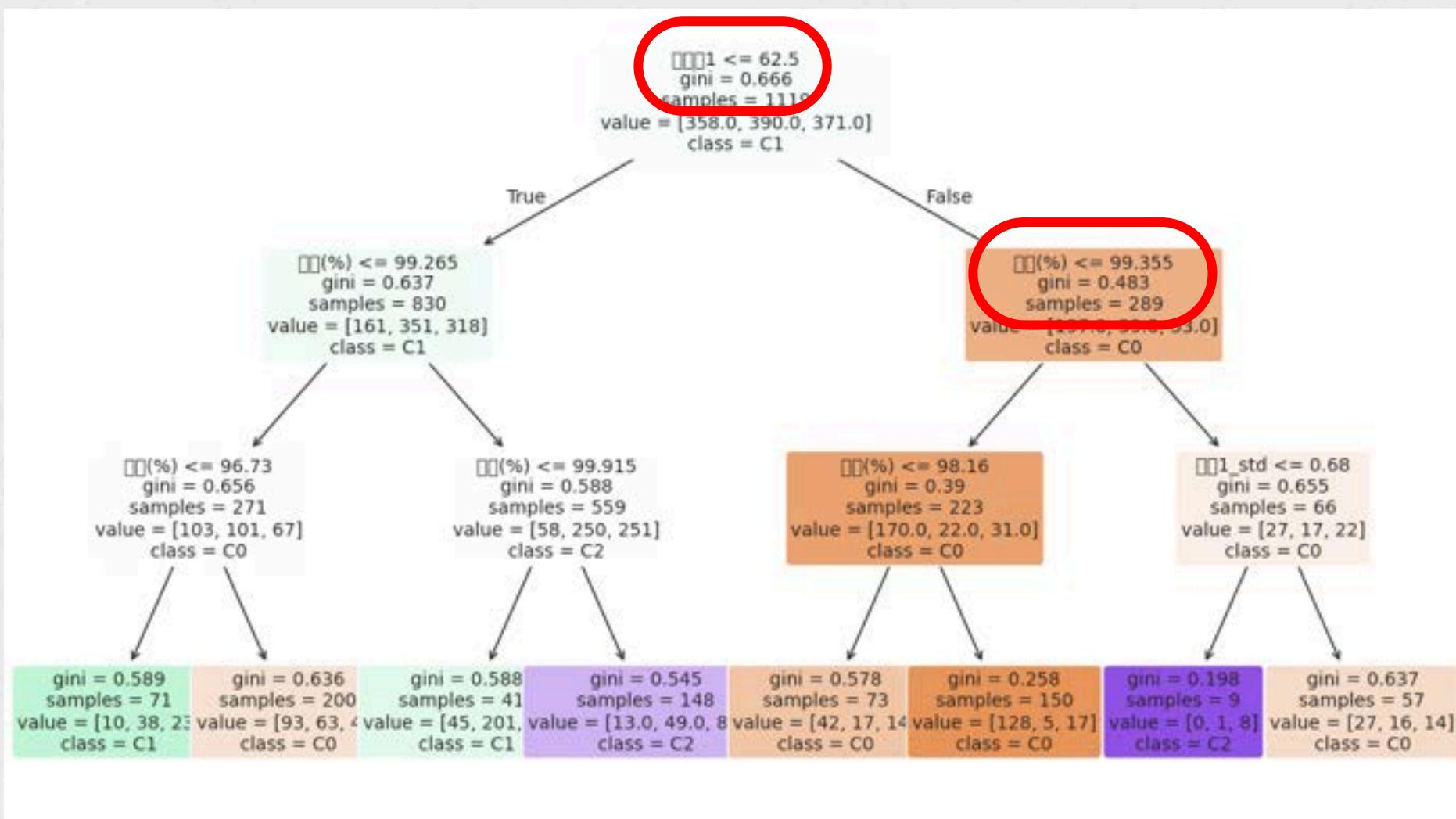
**Cluster 2**

+

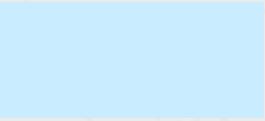
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-  
**Adaptive Control**

## Decision Tree

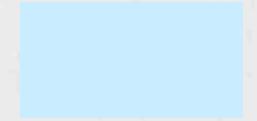


$I1 \leq 62.5$   
 $(%) \geq 99.265$

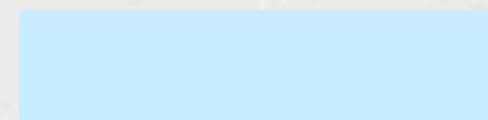


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- 
- 

NG



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Thank you

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