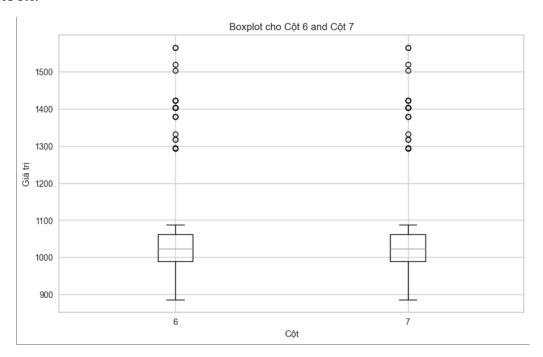
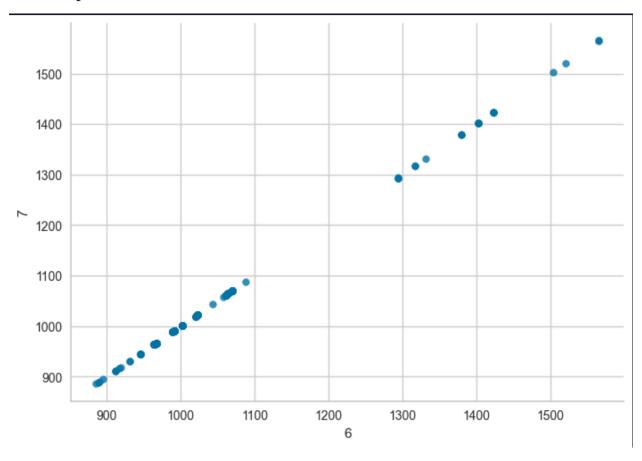
Họ và tên: Nguyễn Tuấn Khang MSV: 2151264665

- Kịch bản chia data:
- + Dữ liệu được đọc từ tệp CSV 'Gia SMP va SMPcap 2021(Giá thị trường SMP).csv'.
- + Chọn cột 6 và 7 để phân tích.
- + Trực quan hóa dữ liệu bằng các biểu đồ Plotbox, Scatterplot, Line Graph và Bar graph
- + Sử dụng Gaussian Mixture với số components là 7.
- + Sử dụng Sarima dự đoán.
- Ånh trực quan hóa:

#### + Plotbox:

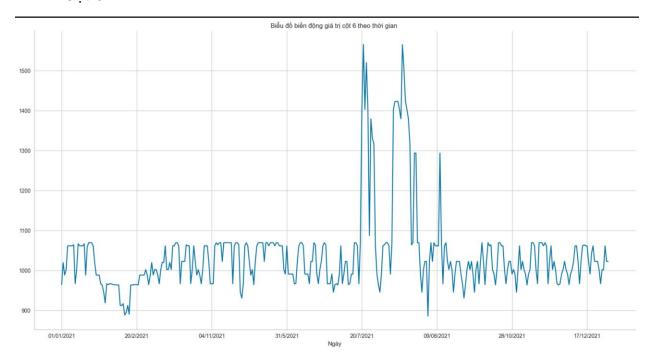


## + Scatterplot:

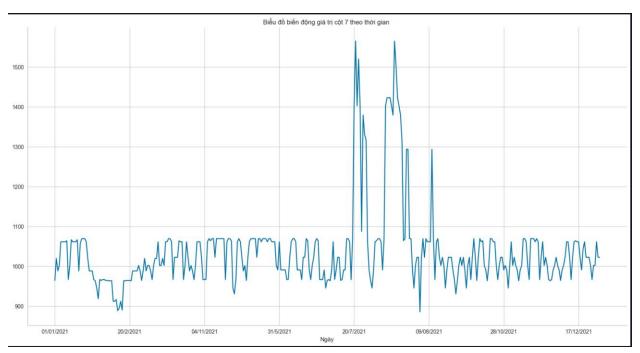


## + Line Graph:

## • Cột 6

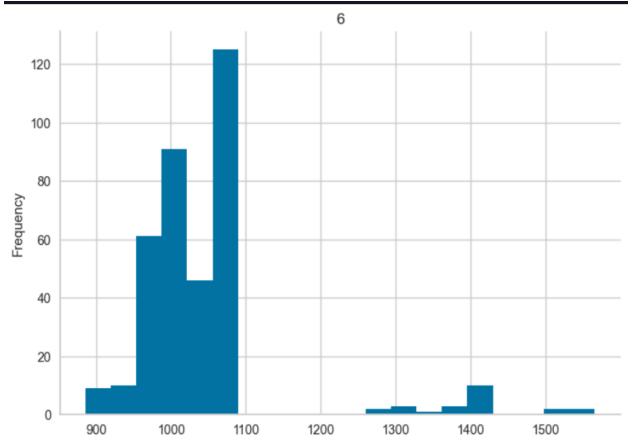


#### • Cột 7:

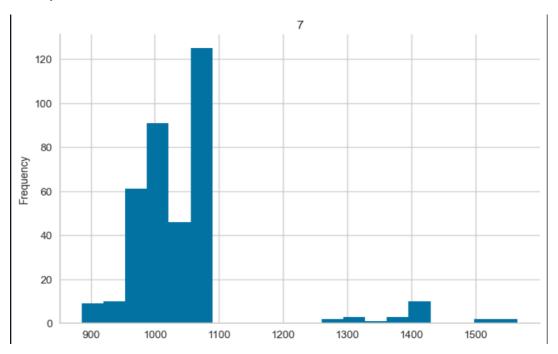


## + Bar Graph:

## • Cột 6:



## • Cột 7:



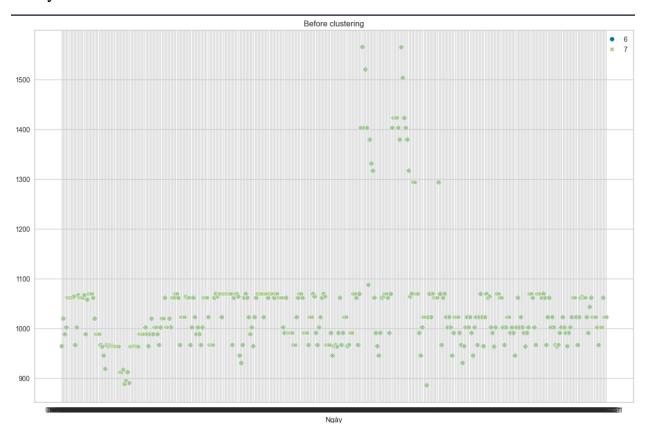
#### - Ånh Training:

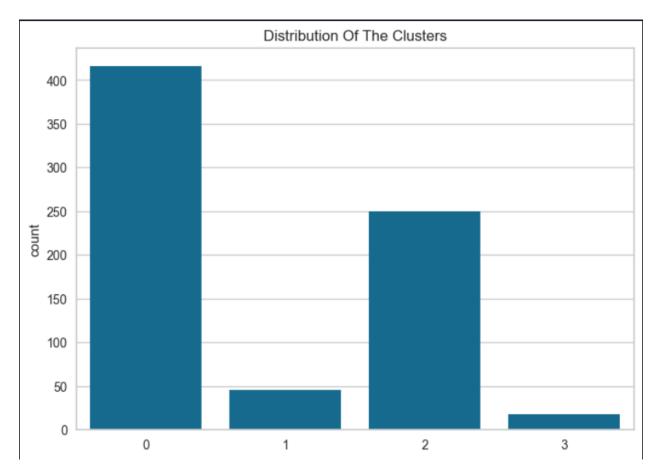
#### $+ \ Bayesian Gaussian Mixture$

```
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       valid_0's multi_logloss: 4.06637e-06
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[400]
```

# - Ảnh kết quả:

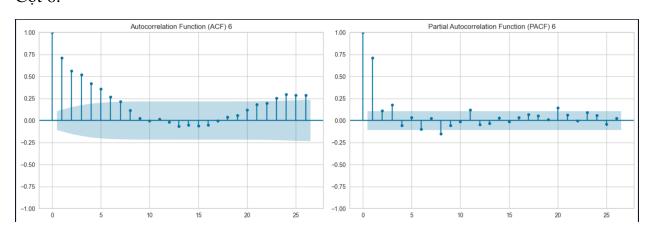
# + BayesianGaussianMixture:



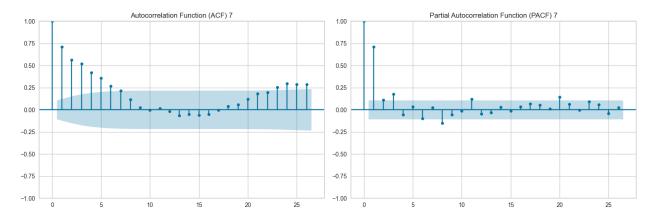


#### + SARIMA:

### Cột 6:

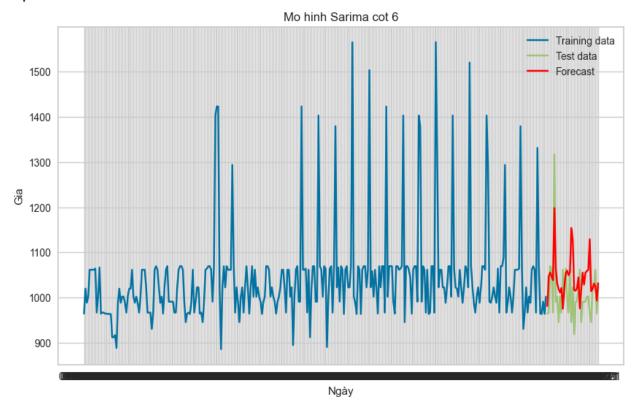


## Cột 7:

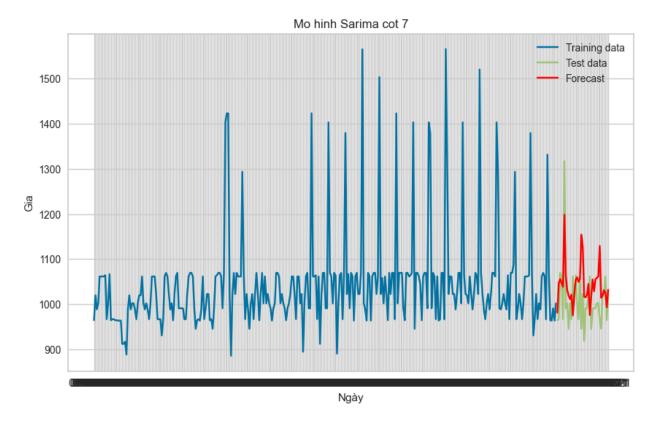


## + Dự đoán:

## • Cột 6:



### • Cột 7:



 $Link\ Github: \underline{https://github.com/tu4nkhaq/phan-tich-chuoi-thoi-gian/blob/main/TH2.ipynb}$