

KNTU_IPM Machine learning Quiz

KNTU_IPM Anomaly detection

A company tracks login activity using features such as the number of logins and the duration of each session.

employee's login behavior suddenly spikes compared to their historical pattern.

Use Gaussian-based anomaly detection on the login data to flag unusual behavior.

```
Import libraries as written
define "def multivariate_gaussian(X, mu, var):"
load data (login_data.csv)
```

```
# Separate features and labels
# Visualize the Login Data
# def estimate_gaussian(X):
# def select_threshold(y_val, p_val):
# Estimate Gaussian Parameters
# Compute Probabilities
# Find Best Threshold Using Validation Set
# Visualize Detected Anomalies
```