

Minor_SVM

```
from google.colab import drive  
drive.mount('/content/drive')  
  
# Example path (adjust if different)  
path = "/content/drive/MyDrive/FakeNews/"  
!pip install scikit-learn pandas numpy  
import pandas as pd  
from sklearn.model_selection import train_test_split  
from sklearn.feature_extraction.text import TfidfVectorizer  
from sklearn.svm import LinearSVC  
from sklearn.metrics import classification_report, accuracy_score  
  
  
# Load dataset  
true_news = pd.read_csv("True.csv") # if uploaded to Colab working dir  
fake_news = pd.read_csv("Fake.csv")  
  
  
# Add labels  
true_news["label"] = 1  
fake_news["label"] = 0  
  
  
# Combine and shuffle  
df = pd.concat([true_news, fake_news], axis=0)  
df = df.sample(frac=1).reset_index(drop=True)
```

```
# Use title + text

df["content"] = df["title"] + " " + df["text"]

X = df["content"]

y = df["label"]

# Split dataset

X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)

# Vectorization

vectorizer = TfidfVectorizer(stop_words="english", max_df=0.7)

X_train_vec = vectorizer.fit_transform(X_train)

X_test_vec = vectorizer.transform(X_test)

# Train SVM

svm_model = LinearSVC()

svm_model.fit(X_train_vec, y_train)

# Predictions

y_pred = svm_model.predict(X_test_vec)

# Evaluation

print("✅ Accuracy:", accuracy_score(y_test, y_pred))

print("\nClassification Report:\n", classification_report(y_test, y_pred))
```