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import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.ensemble import RandomForestRegressor
from sklearn.metrics import mean_squared_error
data = pd.read_csv("blood_donation_data.csv")
X = data.drop(columns=['next_donation'])
y = data['next_donation']
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)
model = RandomForestRegressor(n_estimators=100, random_state=42)
model.fit(X_train, y_train)
y_pred = model.predict(X_test)
mse = mean_squared_error(y_test, y_pred)
print("Mean Squared Error:", mse)
new_data = pd.DataFrame({'months_since_last_donation': [5],
                          'number_of_donations': [3],
                          'total_volume_donated': [750]})
predicted_donation = model.predict(new_data)
print("Predicted Next Donation:", predicted_donation[0])
```