# **Data Pipeline Report**

File: churn.csv | Timestamp: 2025-08-23T15:06:18.118184

## 1. Data Validation Summary

Total Rows	100
Total Columns	14
Missing Values Found	0
Duplicate Rows Found	0

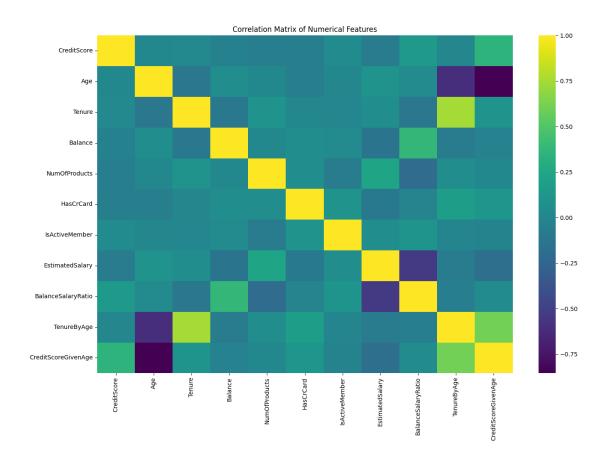
### 2. Feature Engineering Summary

Columns Dropped: RowNumber, Customerld, Surname

Columns Created: BalanceSalaryRatio, TenureByAge, CreditScoreGivenAge

## 3. Exploratory Data Analysis

**Correlation Heatmap** 



#### 4. Final Processed Data

Shape of Final DataFrame: (100, 15)

#### Processed DataFrame Head:

CreditScore	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember
-1.88	-0.47	-1.57	0.44	1.32	1.06	1.0
0.72	0.4	-1.57	-0.23	1.32	1.06	1.0
0.69	-1.52	-1.23	-1.54	1.32	-0.94	-1.0
0.78	-0.47	-1.23	1.13	-1.1	1.06	1.0
0.32	1.23	1.45	-1.21	0.11	-0.94	1.0