# **Data Pipeline Report**

File: churn.csv | Timestamp: 2025-08-23T14:54:22.213966

## 1. Data Validation Summary

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

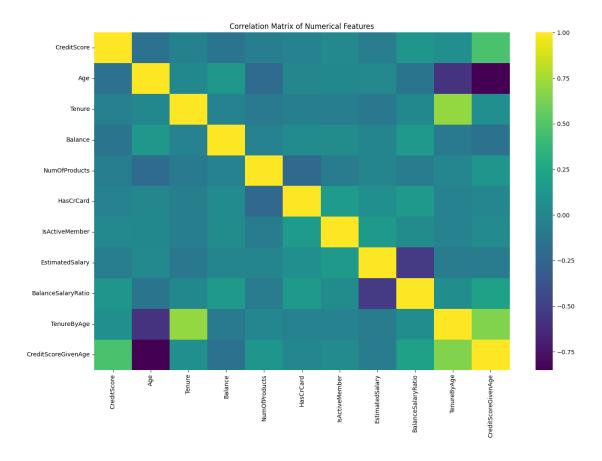
### 2. Feature Engineering Summary

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
-0.9	-0.77	1.36	1.66	-0.01	-1.04	-1.0
-1.51	0.02	-0.37	-1.42	-0.01	0.96	-1.0
-1.08	1.52	0.33	0.9	-0.01	0.96	1.0
0.25	-1.24	1.36	1.31	-1.22	0.96	-1.0
-1.24	1.42	-0.37	1.52	1.19	0.96	-1.0