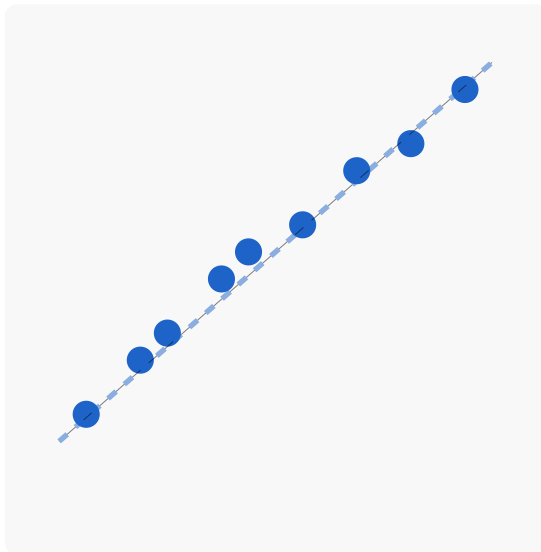


# 2D Relationships: Scatter Plot & Bubble Chart

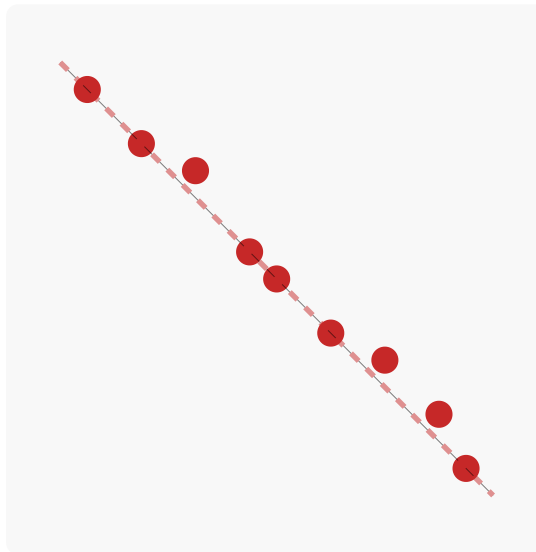
Exploring Relationships Between Continuous Variables

Positive Correlation



Strong Positive ( $r \approx +0.9$ )

Negative Correlation



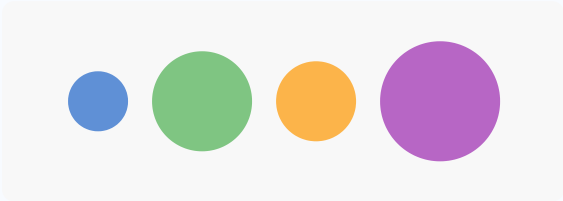
Strong Negative ( $r \approx -0.9$ )

No Correlation

Non-linear Pattern

## Key Features

- Reveals correlation & clusters
- Identifies outliers
- Shows non-linear patterns
- Add trend lines for clarity



### Bubble Chart

Add 3rd dimension (size) + optional 4th (color)

### 💡 Best Practices

- ▶ Use alpha transparency
- ▶ Try hexbin for large data
- ▶ Annotate key points

### When to Use

- ✓ Correlation analysis
- ✓ Trend detection
- ✓ Multivariate exploration