

Ames Housing Price Predictor

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Methodology

Of Our Data Analysis

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FRAME THE PROBLEM



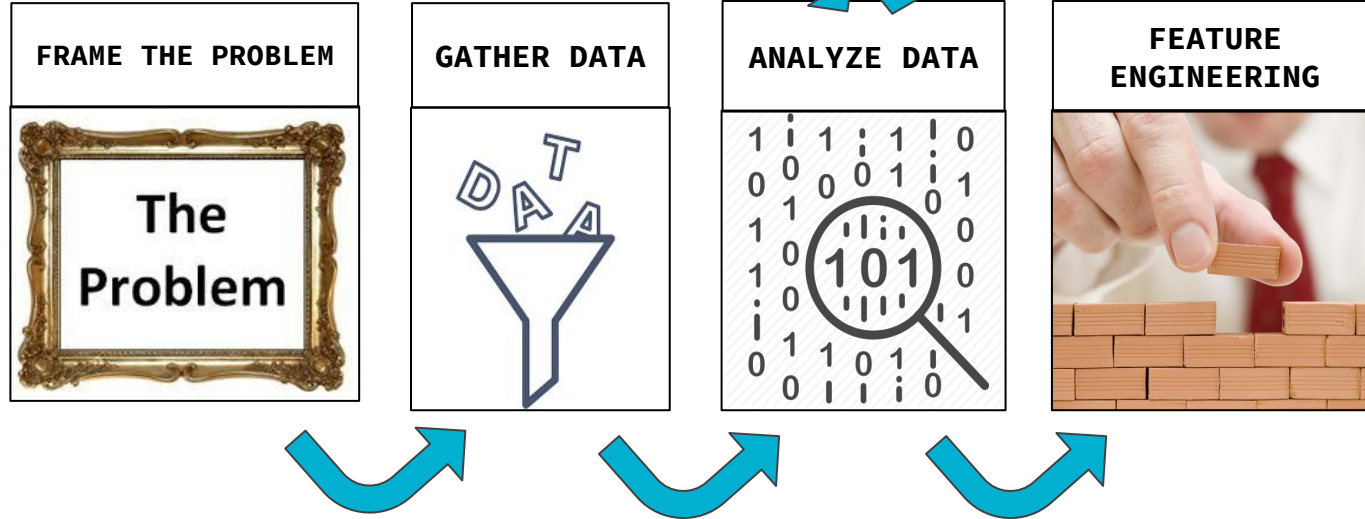
**The
Problem**

Problem Statement

We are trying to make a price prediction template that can accurately predict the price of a house when given it's features.

Methodology

Of Our Data Analysis

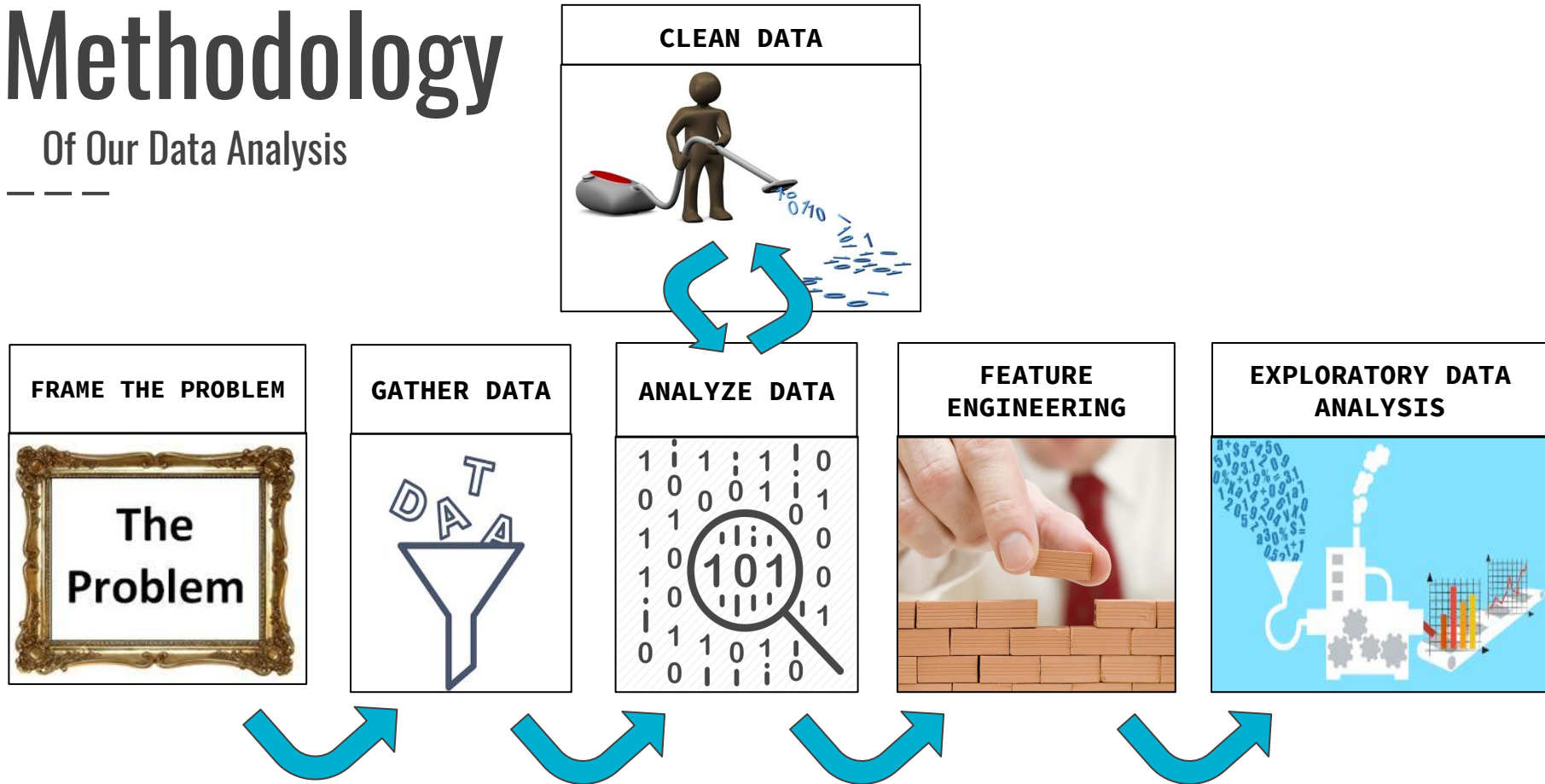


COLUMNS

80  --> Feature Engineering --> 220+

Methodology

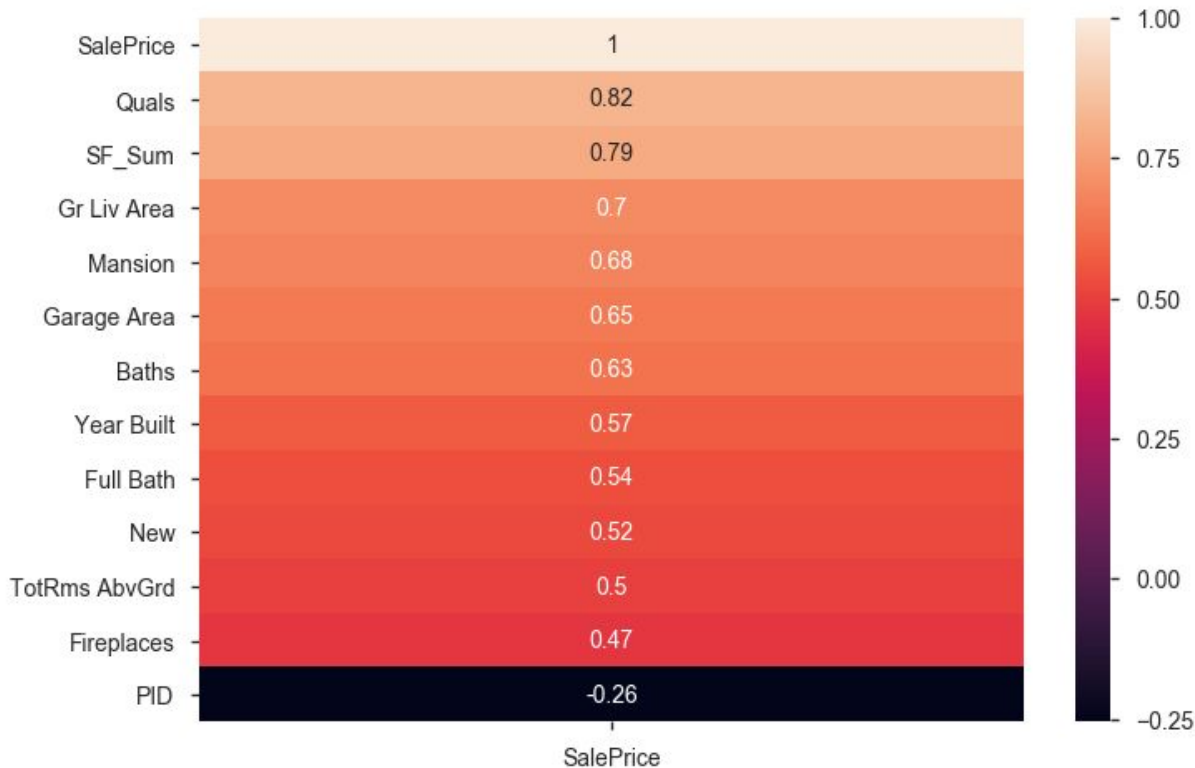
Of Our Data Analysis



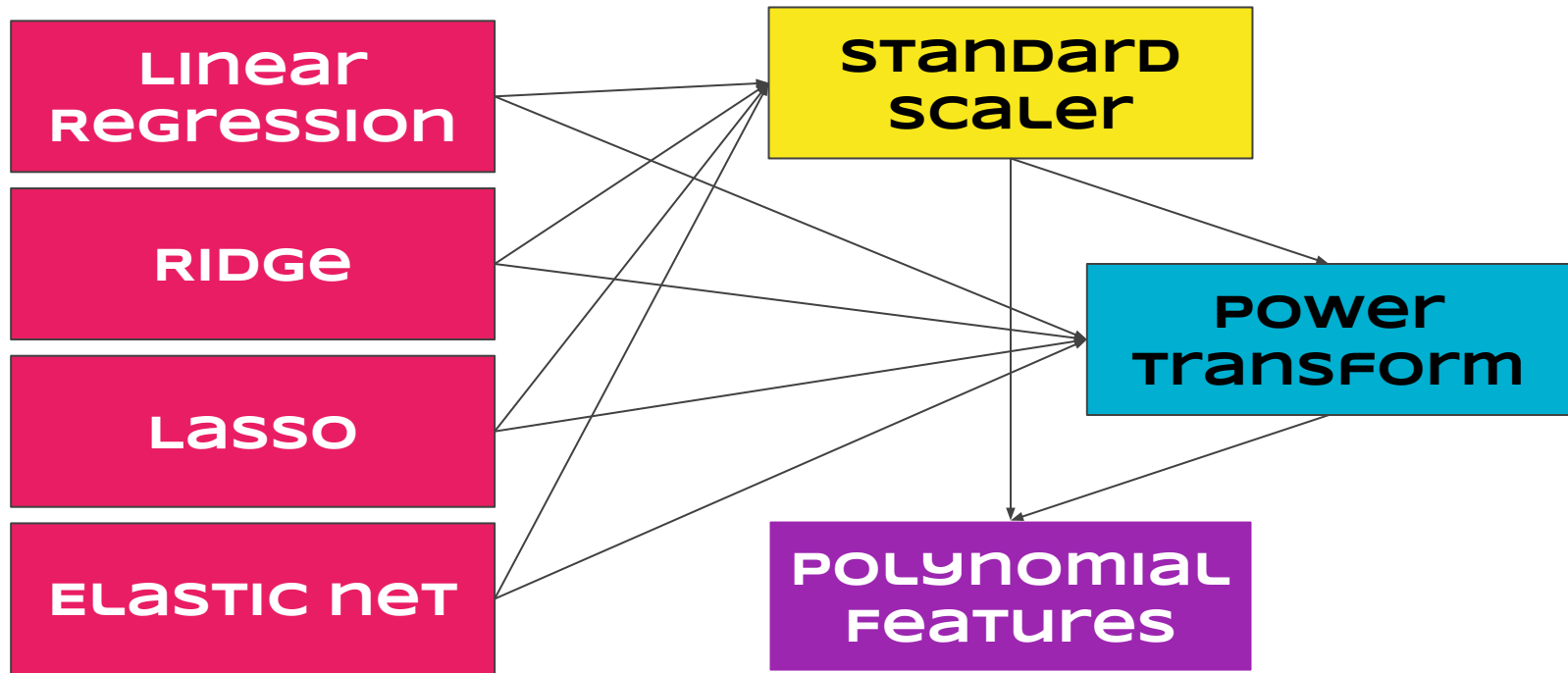
The Chosen Columns

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1. Overall Quality
2. Total Square Footage
3. General Living Area
4. Mansion (Y/N)
5. Garage Area
6. Total # of Baths
7. Year Built
8. # of Full Baths
9. New (Y/N) (21st Century)
10. Total # of Rooms
11. Fireplaces
12. Postal ID



19 Different Models



CONCLUSION

Chosen Model

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Standard Scaler, Polynomial Features, Ridge

- Test RMSE: 21,724
- Train RMSE: 22,544
- Test R^2 : .91
- Train R^2 : .91
- CV Score: .90

	Test RMSE	Train RMSE	Train RMSE % more	CV Score	Test r2 Score	Train r2 Score
Standard Scaler, Polynomial Features and Ridge Model	21724.8	22544.5	-3.64% more	0.895614	0.912015	0.913025
Standard Scaler, Polynomial Features and Lasso Model	23118.8	22103.3	4.59% more	0.892348	0.911082	0.911714
Standard Scaler, Polynomial Features and Linear Regression	23841.3	21812.6	9.3% more	0.897592	0.919221	0.916851
Standard Scaler, Polynomial Features and Elastic Net Model	24091.8	21721.4	10.91% more	0.874178	0.903158	0.917513
Polynomial Features, Power Transform and Linear Regression	24797.4	23114.7	7.28% more	0.899088	0.893056	0.90533

Thank You

Questions?
