

A wide-angle photograph of the San Francisco skyline at sunset. The sky is a mix of orange, pink, and blue, with scattered clouds. The city's buildings are silhouetted against the bright sky, with some windows glowing with light. The foreground shows the water of the bay and a few boats.

Price My Rental

Apartment Price Recommendation Engine

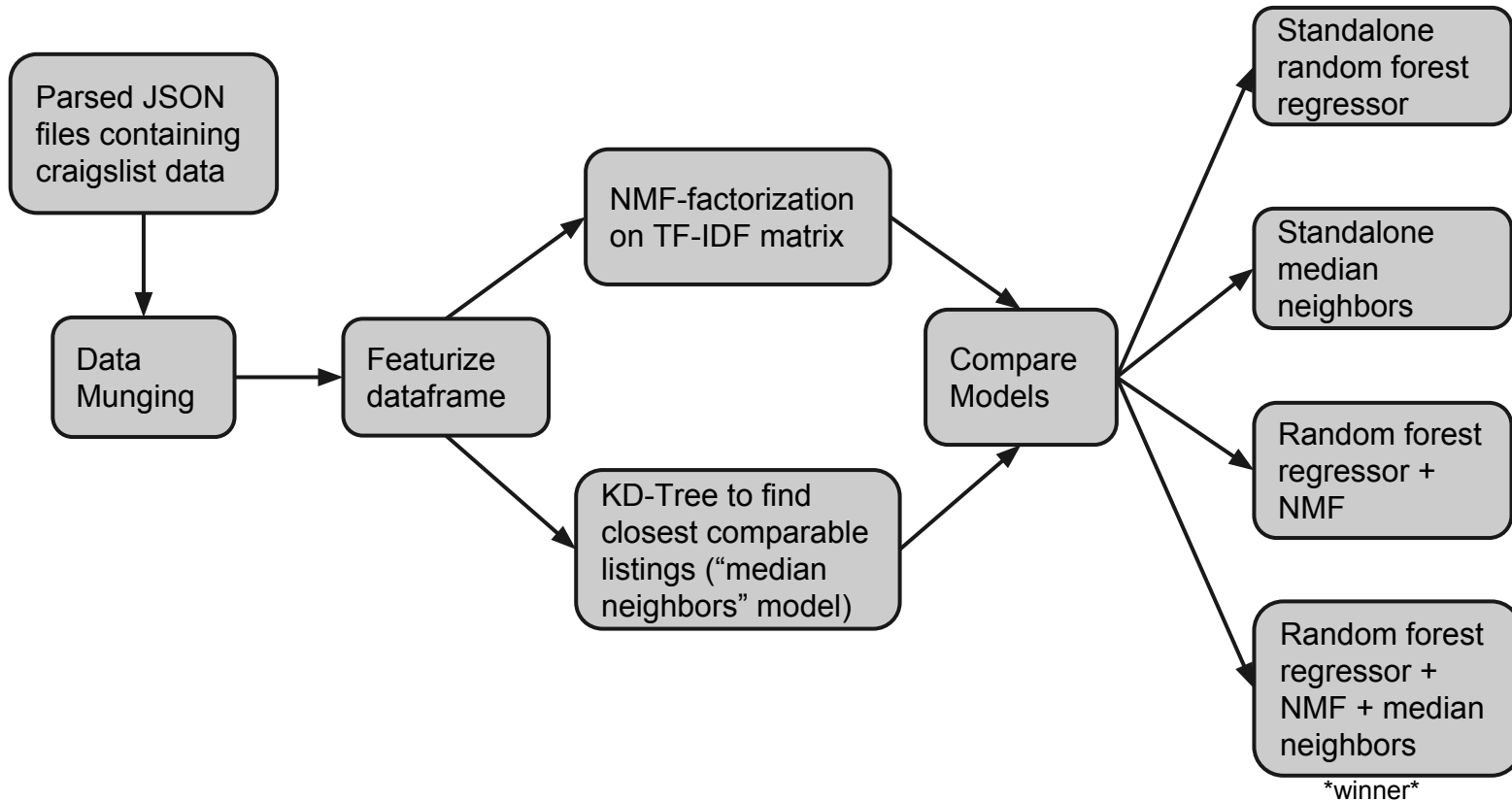
[Get Started](#)

What is a rental worth?

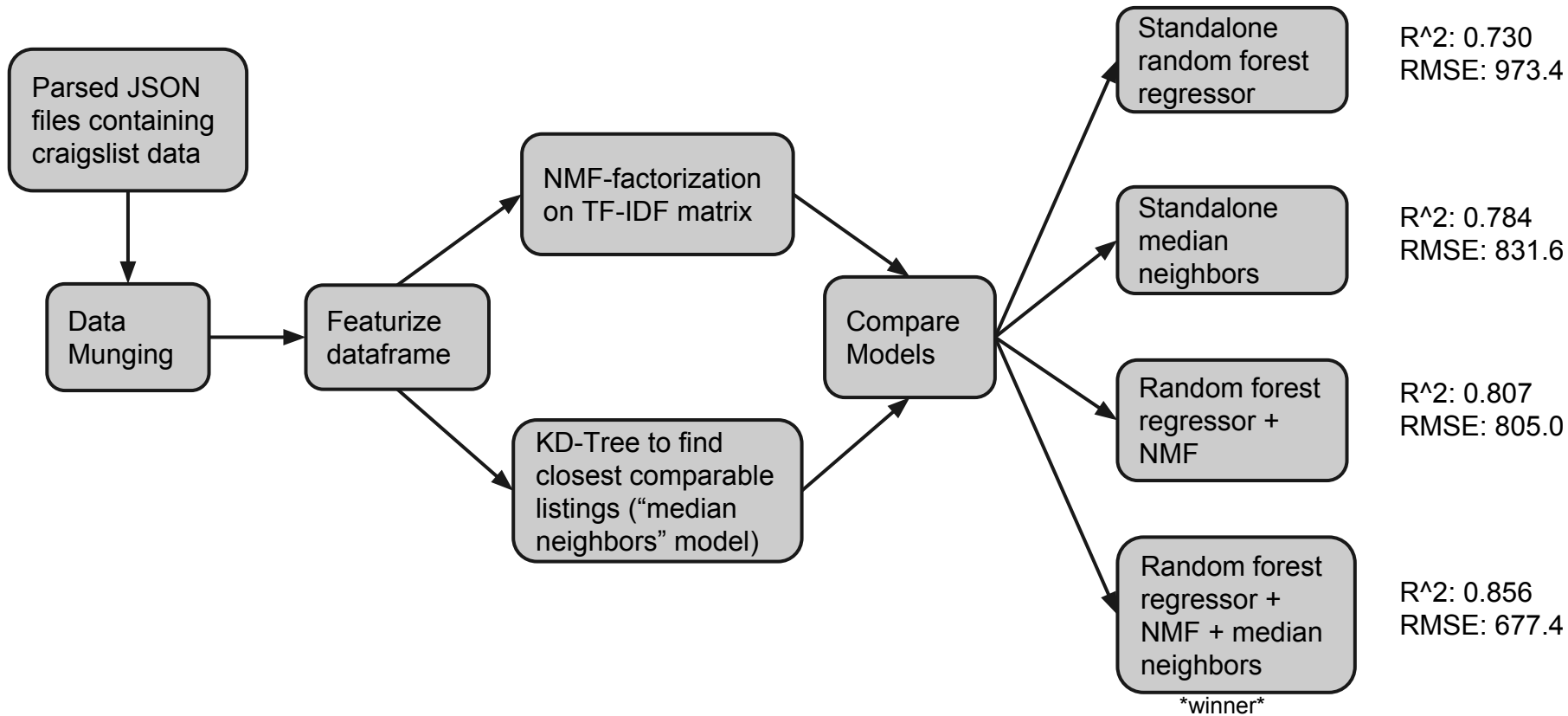
- San Francisco has one of the hottest rental markets in the US, and a ton of variation
- I looked at 9 months of SF craigslist housing rental data, and built a model that accurately predicts market prices for units

Methodology

- Parsed the rental data from JSON files using Pandas
- Added features
 - KD-Trees to find the median price of nearby comparable listings
 - TF-IDF and NMF on listing descriptions to discover latent features
- Compared model performance
 - Grid search on random forest and ridge regressor parameters, decided on random forest
 - Compared to baseline of regression without NMF featurization, simple median of comparable neighbors model
- Built web app front end for the final product, PriceMyRental.io



Data Pipeline + Model Comparison



Data Pipeline + Model Comparison

Taken from actual
craigslist listing on
6/15/15

Listed price on craigslist

Submit

Web app - PriceMyRental.io

Your model-recommended price is: \$3782

Your initial stated price was: \$3950

About:

Price My Rental predicts prices for rental listings in San Francisco. For landlords, the app can recommend a fair monthly price for your property. For tenants, it can help determine if you're overpaying or getting a good deal.

For more information on how it works, please visit the [GitHub repo](#)

 [Contact Me](#)

[Source on Github](#)

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