

Best Investments Housing Market U.S.A

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What defines a good investment?

- Low Risk
- High Return
- The lower the risk and the higher the return the better the investment will be for a house flipper.



Business Model

- I would use my predictions for house flippers, short term arbitrage deals, and any 1 year lease buildings.
- My predictions work best for these cases because the housing market is risky and my model had a higher error rate than the predicted return. Meaning an investor has to buy for less than fair market value and create value to make money without risking too much.

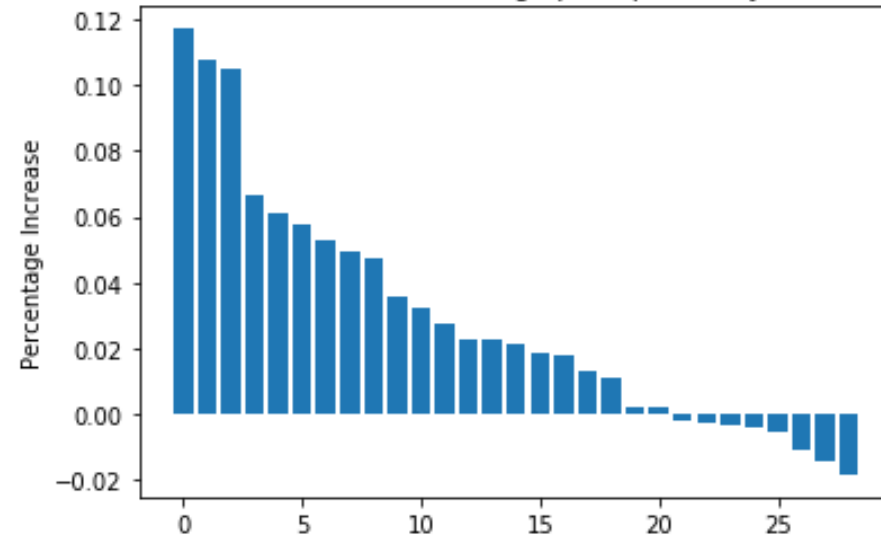


Investing and Risk

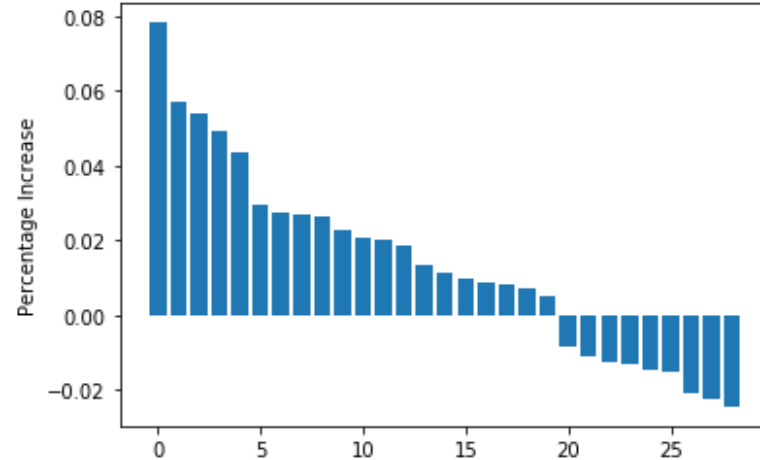
- I lowered the risk of the investments in certain zipcodes in few ways
- Filtered only the top 5 long term returns per state
- Remove zipcodes with negative future predictions
- Only zipcodes with less than a 15% model training error or less
- Filter by top percentage return predictions in 1 year, 2 year, and 4 years



Iteration	Percentage Increase
0	0.118
1	0.108
2	0.105
3	0.067
4	0.062
5	0.058
6	0.052
7	0.050
8	0.048
9	0.036
10	0.032
11	0.028
12	0.023
13	0.023
14	0.022
15	0.019
16	0.018
17	0.013
18	0.011
19	0.002
20	0.002
21	-0.001
22	-0.002
23	-0.003
24	-0.004
25	-0.005
26	-0.010
27	-0.014
28	-0.018



Median Home Value Price Change per zipcode 2 years from now



[94011, 69081, 100226, 100265, 100220, 89862, 88764, 100235, 59958, 88961, 80620, 59894, 95316, 59973, 83894, 69428, 93976, 81097, 69037, 82930, 83510, 93856, 67188, 93858, 89827, 83143, 59901, 83088, 89833]

The Top 5 Zipcodes

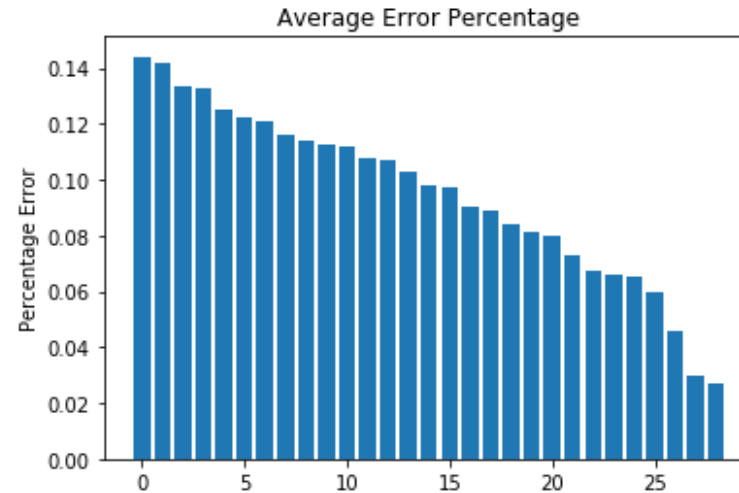
- 94011 Burlingame California 9% error 12% return 1 year
- 69081 Crofton Maryland 11% error rate 10% return 1 year
- 100226 Key Largo Florida 8% error 5% return 1 year
- 100265 Unable to find on google, 3% error 10% return 1 year
- 100220 Memphis Tennessee 8% error 5% return 1 year

The 1 Year Investments are the best

- The 1 year investments were a better percentage return
- The 2 and 4 year investments are not worth the same amount or less than $\frac{1}{2}$ the return as the 1 year



Error Rate



[93976, 89862, 95316, 83088, 88764, 82930, 88961, 59901, 100220, 59894, 83143, 69081, 83894, 69428, 89827, 67188, 94011, 80620, 100226, 83510, 100235, 93858, 93856, 89833, 59973, 69037, 81097, 59958, 100265]

X
ERROR

The Error is the percentage that the predictions were different from the actual price in the training model. 15% or less is a reasonable amount of error and risk.



Recommendations

- I would suggest buying homes that are undervalued and fix them so that the house is worth more than what is spent on fixing and buying it.
- The market is not good enough to simply buy at market price and then wait for the market to go up. The risk would not be worth it.
- I would make sure to buy and sell within 1 year because it is the most accurate prediction time period and the best return possible.



Future Work

- Some future work would be running models on all the zipcodes and tuning the model parameters to make better models.
- Also adding in economic factors like jobs, schools, business projects, taxes in that area, and how many people leave versus how many people move there.
- Figure out which houses per zipcode go up in value the most, the nicest houses, the middling houses, or the poor people houses.



Thanks

- Thanks for looking at my presentation!