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Root Mean Square Error (RMSE) is the standard deviation of the [residuals](https://www.statisticshowto.datasciencecentral.com/residual/) (prediction errors). Residuals are a measure of how far from the regression line data points are; RMSE is a measure of how spread out these residuals are. In other words, it tells you how concentrated the data is around the [line of best fit](https://www.statisticshowto.datasciencecentral.com/line-of-best-fit/). Root mean square error is commonly used in climatology, forecasting, and [regression analysis](https://www.statisticshowto.datasciencecentral.com/probability-and-statistics/regression-analysis/) to verify experimental results

<https://www.statisticshowto.datasciencecentral.com/rmse/>

LOWER RMSE MEANS BETTER FIT

HIGHER RMSE MEANS WORSE FIT

GPR- guassian process regression

Svm- support vector machine

THE DOTS EACH OF THEM REPRESENT THE PRICES ALONG WITH THE YEARS FROM THE DATASET 1995 TO 2017 23

I HAVE CHOSEN THE PREDICTIVE MODEL GAUSSIAN PROCESS BECAUSE OF ITS STRONG RESULTS WITHIN MATLAB

The second screenshot illustrates a much more detail oriented and cleaned dataset which exhibits the true prediction after taking away stray anomalies which tainted the dataset, the blue dots show on the X axis the value of the properties and on the Y axis it shows the prices rising in accordance of the years; the yellow dots indicate the prediction of the house prices this is due to factors such as mortgage borrowing levels declining this could be offset in tangent to rise in interest rates from banks which will put off buyers as they will be in a quagmire of raising the initial deposit, as well as the financial crash of 2008 which was due to the unrelenting and carefree loans of mortgages by banks without doing their due diligence to borrowers who could not pay back the amount borrowed caused the bubble to burst.

As well as the factors mention one of the main sticking point that I have mentioned in this dissertation and touched on it is politics one of the most prominent political saga unfolding is Brexit this has played a substantial part and has acted as a deterrent for buyers of all caliber- first time buyers, experienced serial buyers etc. policies play a huge role in the housing market in cases whether it can make or break it, for instance this current political malaise has scared buyers into taking out mortgages which has been noted by Nationwide in a widening research in the drop of mortgages given by banks and building societies because buyers are risk averse and awaiting for

RMSE is the error rate of the residuals or prediction errors- they are measured from the regression line data points

<https://www.google.com/search?rlz=1C1GCEA_enGB754GB754&ei=xfKhXLzGN4yG1fAPxsKQoAg&q=london+transactions+1995-2013&oq=london+transactions+1995-2013&gs_l=psy-ab.3...52002.52664..52861...0.0..0.49.87.2......0....1..gws-wiz.......0i71.gDIGg6o9zew>

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| [Home Away From Home? Foreign Demand and London House Prices - bde.es](https://www.bde.es/f/webbde/INF/MenuHorizontal/SobreElBanco/Conferencias/2015/Archivos/27_1140B_BADARINZA_PAPER.pdf)  www.bde.es  higher shares of residents originating from their countries, but it appears that these countries are less likely to direct capital towards premium residential areas. |

<http://www.doc.ic.ac.uk/~mpd37/theses/2015_beng_aaron-ng.pdf>

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