CS599 ML Project 2 Report
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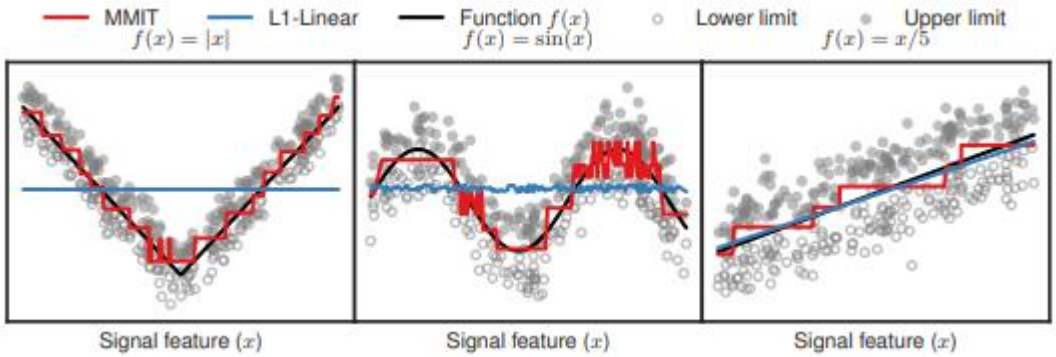
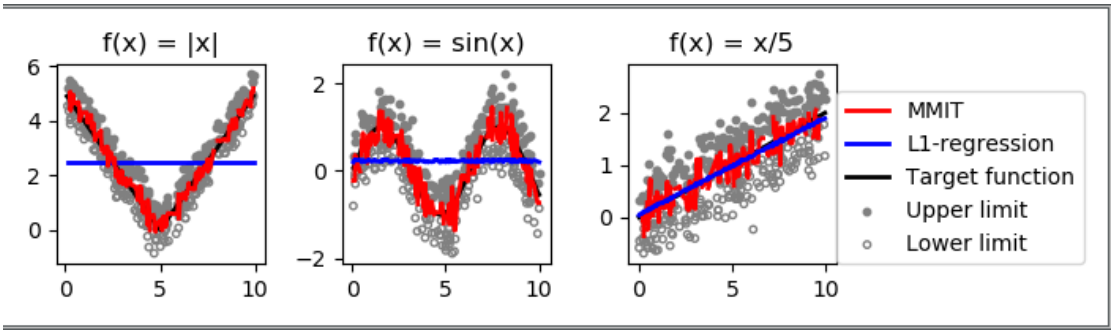
1. Original figure, and a citation to where the figure came from
   Citation: Alexandre Drouin, Toby Dylan Hocking, Francois Laviolette, “Maximum Margin Interval Tree”, Figure 4
   Original figure



2. Figure generated by my code



3. Do all/most of the details of the two figures match?
   Most of these two figures are similar. However, the red line in my figure seems overfitting.
4. Paragraph explaining what software/libraries you used, and what you implemented from scratch.
   In this project, I use python to deal with MMIT and generate figure, and I use R to generate L1-regression parameters. For python, I use three packages, I use pandas for dealing with data, numpy for calculating, and matplotlib.pyplot for drawing figure. In R, I implement R package penalty Learning and I use the IntervalRegressionCV function in it. What’s more I also use future, future.apply and ditectlabels as necessary tool to run penalty Learning package.
5. Issues you had reproducing the figure.
   There are two issues of this figure, first, the original program uses dynamic programming, but I do not use it. On the other hand, the value of margin in this figure is not generated from CV, I think it is the main reason that make the figure overfit.