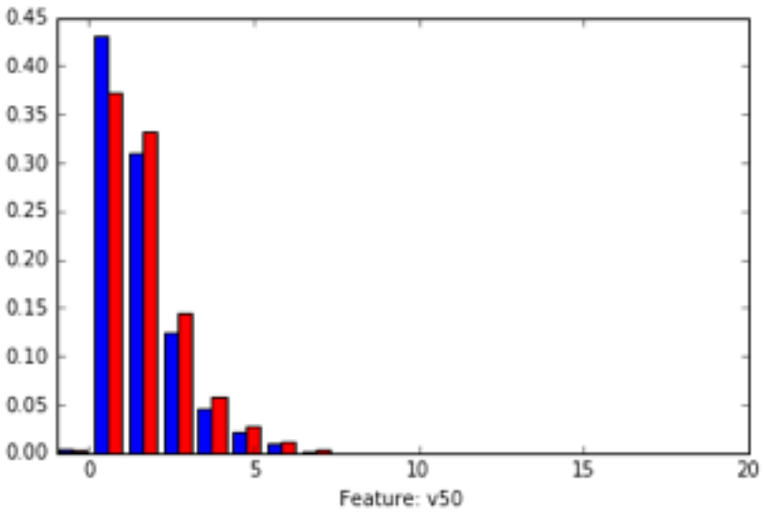
BNP Cardif claims management

1 Fast. Claims for which approval could be accelerated leading to faster payments
2 Audit. Claims for which additional information is required before approval

2 class classification

$$logloss = -\frac{1}{N}\sum_{i=1}^{N}\left(y_i \log(p_i) + (1 - y_i)\log(1 - p_i)\right)$$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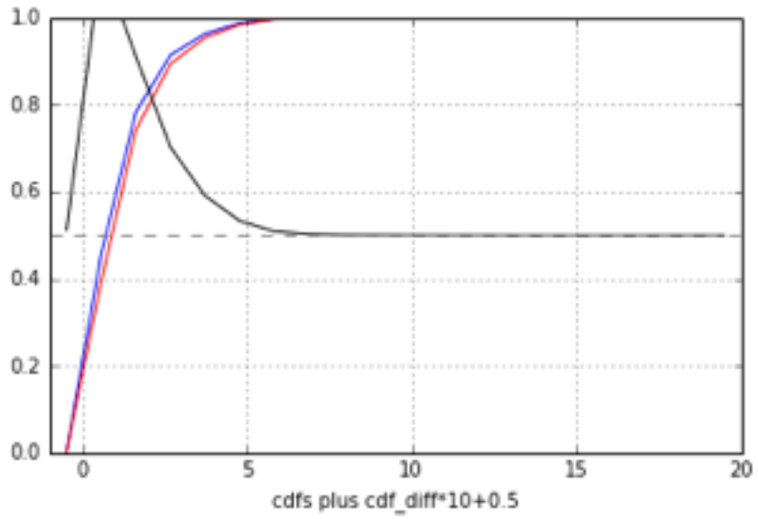
0.25
0.20
0.15
0.10
0.05
0.00
0
5
10
15
20
Feature: v50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0.2
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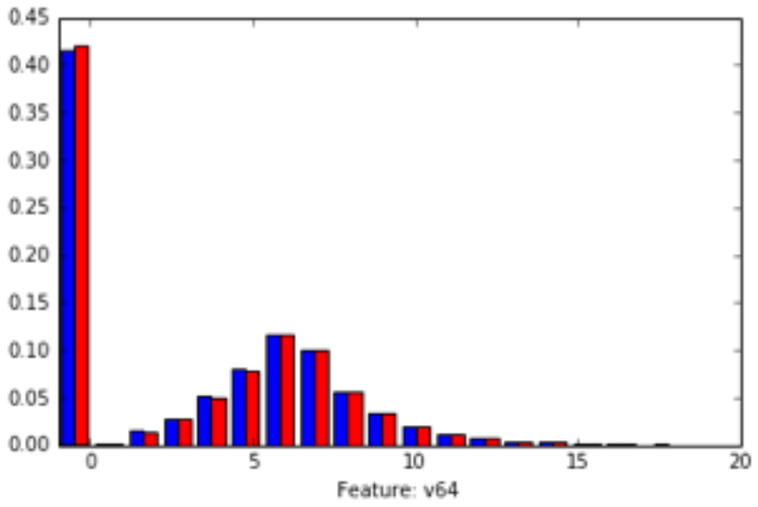
5
10
15
20
cdfs plus cdf_diff*10+0.5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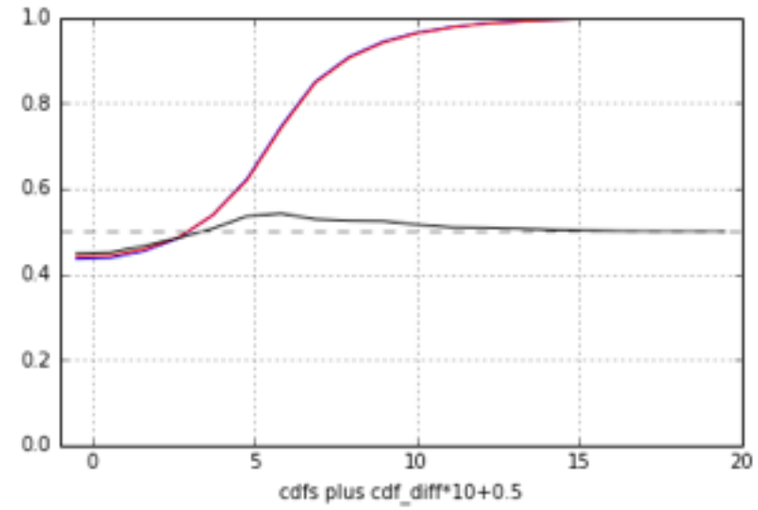
15
20
Feature: v64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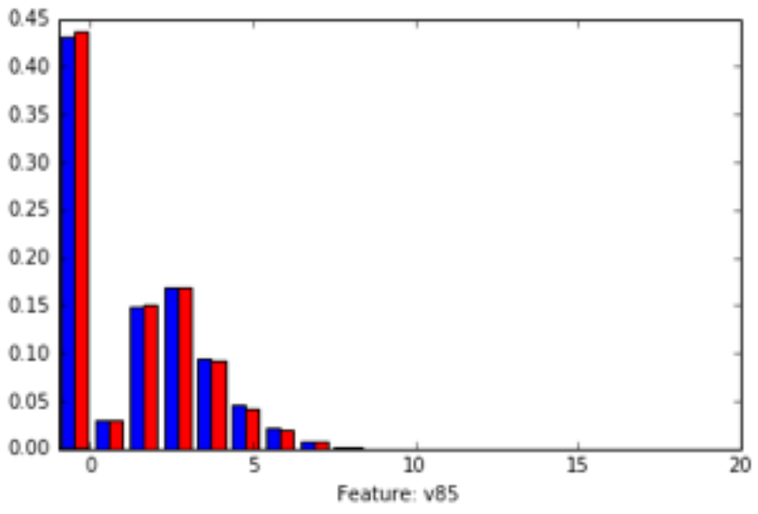
cdfs plus cdf_diff*10+0.5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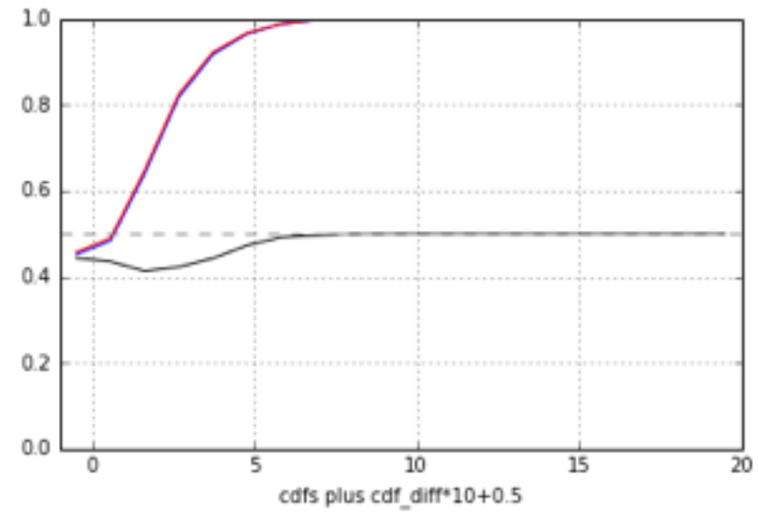
15
20
Feature: v85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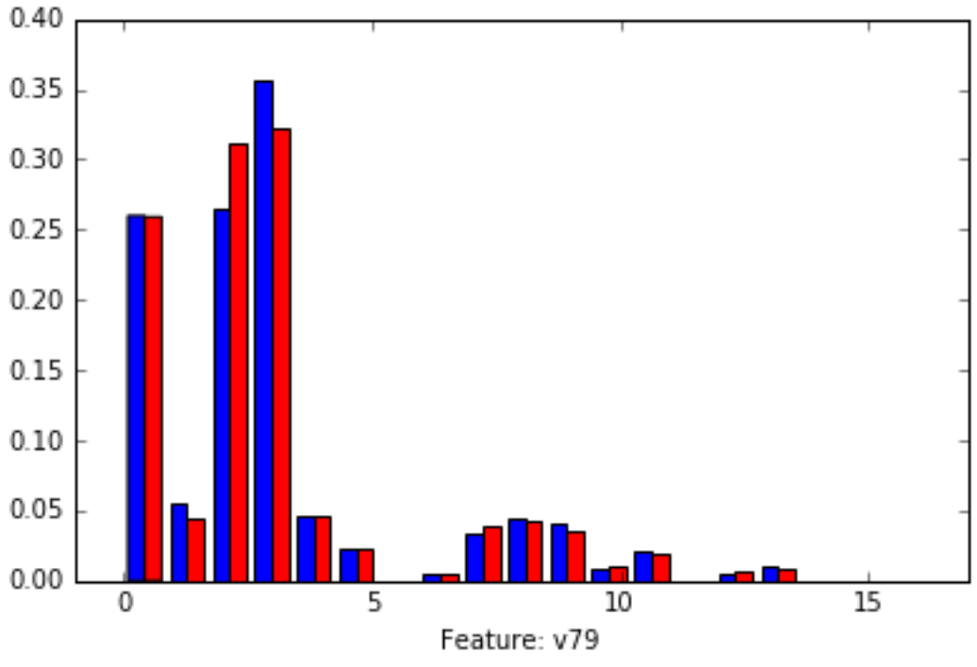
cdfs plus cdf_diff*10+0.5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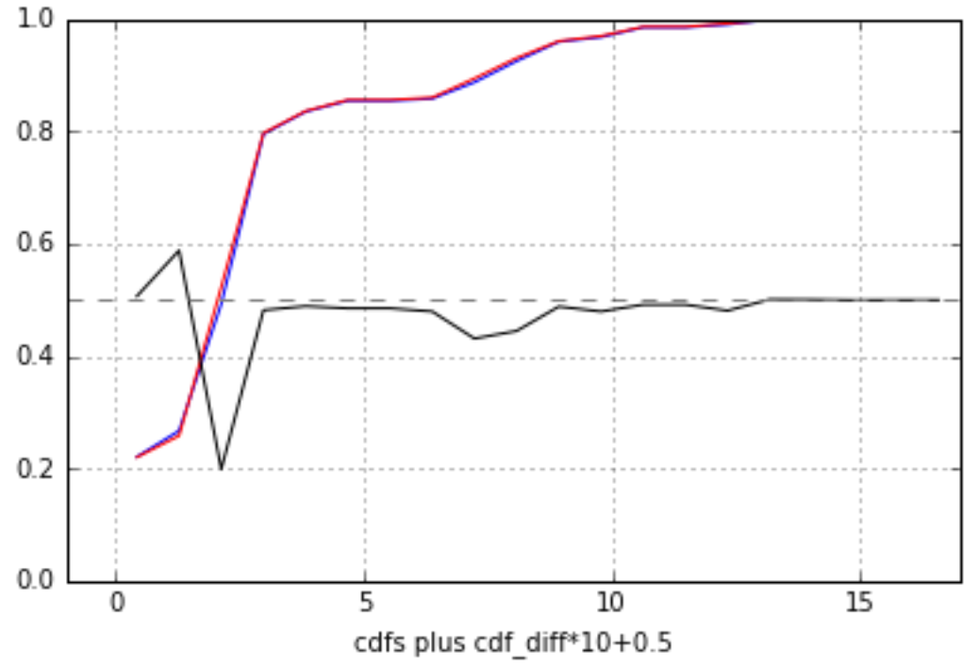
Feature: v79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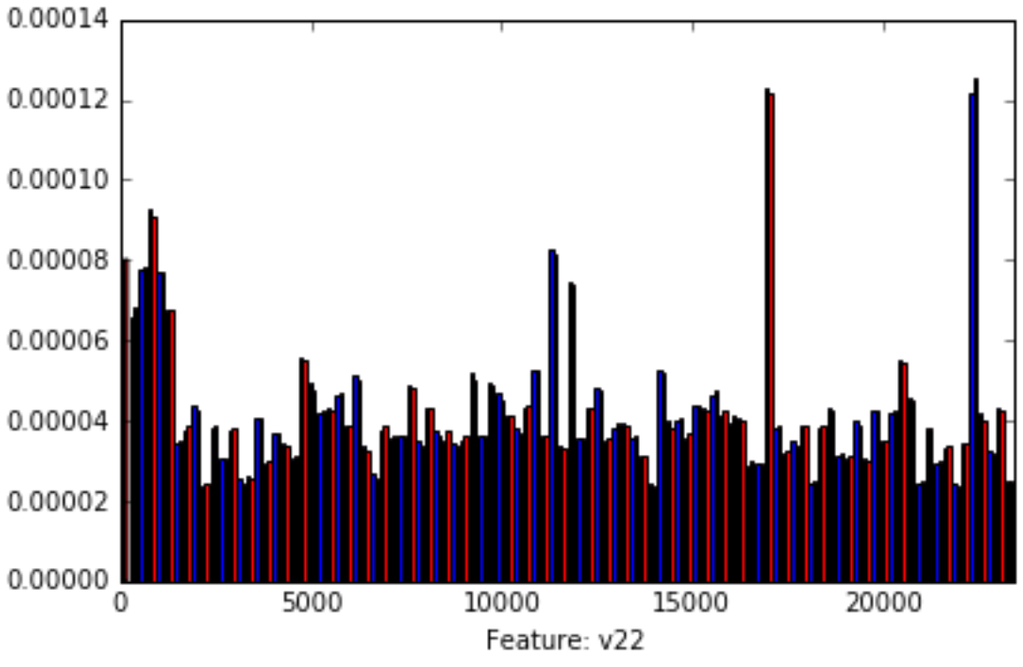
15
cdfs plus cdf_diff*10+0.5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0.00006
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0.00002
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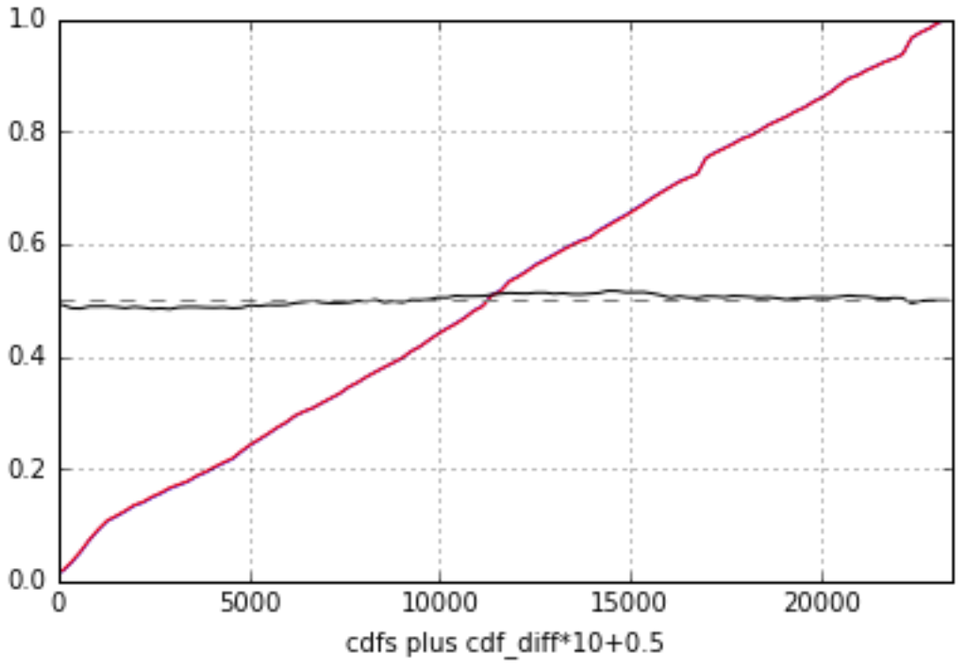
0
5000
10000
15000
20000
Feature: v22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10000
15000
20000
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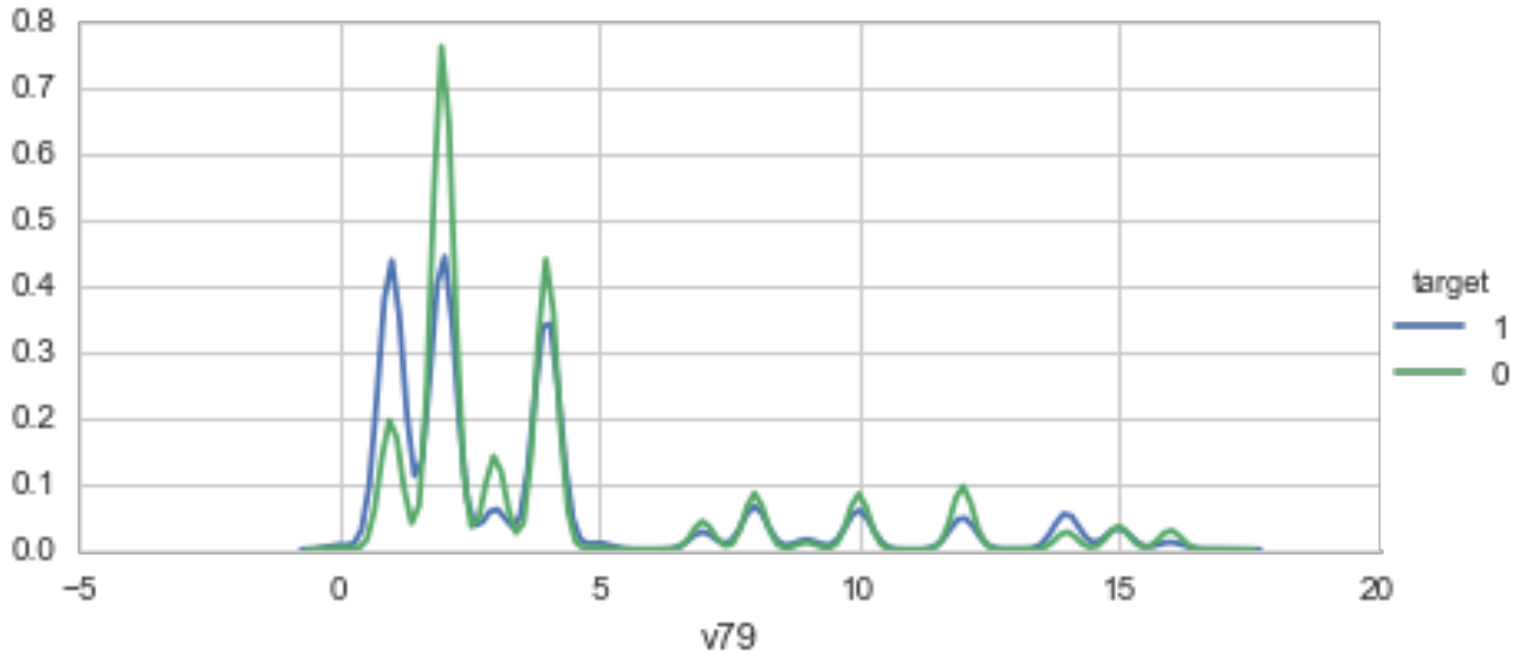
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0.6
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0.4
0.3
0.2
0.1
0.0
−5
0
5
10
15
20
v79
target
1
0

Plan

- Feature engineering
  %percentage
  interactions
  genetic programming

- LogReg + Ridge/Lasso/Elastic

- Text feature interpretation

- LibFM
  http://libfm.org

- RGF
  http://stat.rutgers.edu/home/tzhang/software/rgf/

- NeuraI Network
  Keras / Lasagne / Caffe / Tensorflow

- SVM

- ET / RF / XGBoost hyperopt

- Stacking / BIending / Voting

Links

http://opendatascience.ru
http://facebook.com/playittodeath