The greedy shapelet search (GSS) and the shapelet transform (ST) were coded from scratch. The source code is available at github.com/papelero/greedy-shapelet-search

The evaluation of the paper will be structured in three subsections

1. Detailed evaluation based on GunPoint dataset
2. Generalized performance comparison on benchmark datasets
3. Proprietary real-world data

Detailed evaluation based on GunPoint dataset

* Visualize minimum distances of best shapelet for GSS and ST for training and test data 🡪 intended to show why margin is important
* Plot shapelets 1-5 for GSS and compare to shapelets 1-5 of ST (visualized in Hills et al.) including WHERE they are extracted along sequence
* Repeat the benchmark in Table 6 taken from Hills et al. (columns 1,3,4,6) for GSS
* Plot accuracy of linear SVM over num\_shapelets 1-75 for GSS
* Comparison of GSS and ST for num\_shapelets = 5 and imbalanced data using number of target class = 1, 3, 5, 10

Generalized performance comparison on benchmark datasets

* Compare accuracy of linear SVM for shapelets of GSS and ST for all binary classification problem from Hills et al. using num\_shapelets = n/2

Proprietary real-world data

* Compare accuracy of linear SVM for GSS and ST, using target class = 1, 3, 5, 10 and shapelet\_num = 5