1 digit pin:

binary classification:

1. logistic regression:

* FAR = 0.0
* FRR = 1.0
* log-loss = 0.518432756242981
* F-score = 0.0

2. support vector machine:

* FAR = 0.06417112299465241
* FRR = 0.1927710843373494
* log-loss = 0.2421360145907942
* F-score = 0.8271604938271606

3. random forest:

* FAR = 0.0481283422459893
* FRR = 0.0963855421686747
* log-loss = 2.1746636989388217
* F-score = 0.8982035928143712

multiclass classification:

1. logistic regression

* log-loss = 1.0383529970738523
* F-score = 0.19674796747967477

2. support vector machine

* log-loss = 0.7285960283675388
* F-score = 0.2472639487379127

3. mul. random forest

* log-loss = 5.756462732485114
* F-score = 0.3325224106885973

2 digit pin:

binary classification:

1. logistic regression:

* FAR = 0.0
* FRR = 1.0
* log-loss = 0.6925123043742528
* F-score = 0.0

1. support vector machine:

* FAR = 0.1111111111111111
* FRR = 0.36538461538461536
* log-loss = 0.5001676426197083
* F-score = 0.2306273062730627

1. random forest:

* FAR = 0.10416666666666667
* FRR = 0.14743589743589744
* log-loss = 4.374911676688687
* F-score = 0.375

multiclass classification:

1. logistic regression

* log-loss = 1.095840907216159
* F-score = 0.15326213228405472

2. support vector machine

* log-loss = 1.0235458703566869
* F-score = 0.3066694514062935

3. random forest

* log-loss = 11.20591411923769
* F-score = 0.2751932518510775