

Trace for forward selection

```
PS C:\Users\Clem\Desktop\local code\170\proj2\output> & .\project2.exe'
```

Welcome to Clement Chen's Feature Selection Algorithm.

Please enter total number of features: 4

Type the number of the algorithm you want to run.

1. Forward Selection

2. Backward Elimination

3. Special (implement ltr)

1

Beginning search...

Using feature(s) { 1 } accuracy is 0.41%

Using feature(s) { 2 } accuracy is 84.67%

Using feature(s) { 3 } accuracy is 63.34%

Using feature(s) { 4 } accuracy is 65.00%

Feature set { 2 } was best, accuracy is 84.67%

Using feature(s) { 2 1 } accuracy is 91.69%

Using feature(s) { 2 3 } accuracy is 57.24%

Using feature(s) { 2 4 } accuracy is 14.78%

Feature set { 2 1 } was best, accuracy is 91.69%

Using feature(s) { 2 1 3 } accuracy is 93.58%

Using feature(s) { 2 1 4 } accuracy is 69.62%

Feature set { 2 1 3 } was best, accuracy is 93.58%

Using feature(s) { 2 1 3 4 } accuracy is 44.64%

Feature set { 2 1 3 4 } was best, accuracy is 44.64%

Finished search!! The best feature subset is { 2 1 3 }, which has an accuracy of 93.58%

Trace for Backwards elimination

```
PS C:\Users\Clem\Desktop\local code\170\proj2\output> cd 'c:\Users\Clem\Desktop\local code\170\proj2\output'
```

```
PS C:\Users\Clem\Desktop\local code\170\proj2\output> & .\project2.exe'
```

Welcome to Clement Chen's Feature Selection Algorithm.

Please enter total number of features: 4

Type the number of the algorithm you want to run.

1. Forward Selection
 2. Backward Elimination
 3. Special (implement ltr)
- 2

Using all features { 1 2 3 4 } accuracy is 0.41%

Beginning search.

Using feature(s) { 2 3 4 } accuracy is 84.67%

Using feature(s) { 1 3 4 } accuracy is 63.34%

Using feature(s) { 1 2 4 } accuracy is 65.00%

Using feature(s) { 1 2 3 } accuracy is 91.69%

Feature set { 1 2 3 } was best, accuracy is 91.69%

Using feature(s) { 2 3 } accuracy is 57.24%

Using feature(s) { 1 3 } accuracy is 14.78%

Using feature(s) { 1 2 } accuracy is 93.58%

Feature set { 1 2 } was best, accuracy is 93.58%

Using feature(s) { 2 } accuracy is 69.62%

Using feature(s) { 1 } accuracy is 44.64%

Feature set { 2 } was best, accuracy is 69.62%

Finished search!! The best feature subset is { 1 2 }, which has an accuracy of 93.58%

```
PS C:\Users\Clem\Desktop\local code\170\proj2\output>
```

Clement Chen, cchen606

https://github.com/cchen606/cs170_project2