

```
for i = 1 to 100:  
  print "Hello world\n";
```

Instrument loops

Extract Features

Simulate time for
unroll factors 1- 8

Identify Best
Unroll Factor

Training Dataset

MULTI-CLASS CLASSIFICATION:
Random Forests
SVM

TRAINING

```
int a[20];  
for (i = 0; i < 20; i++):  
  a[i] = i;
```

Extract Features

Test Dataset

```
int a[20];  
for (i = 0; i < 20; i = i+2):  
  a[i] = i;  
  a[i+1] = i+1;
```

Predict Unroll
Factor

TESTING