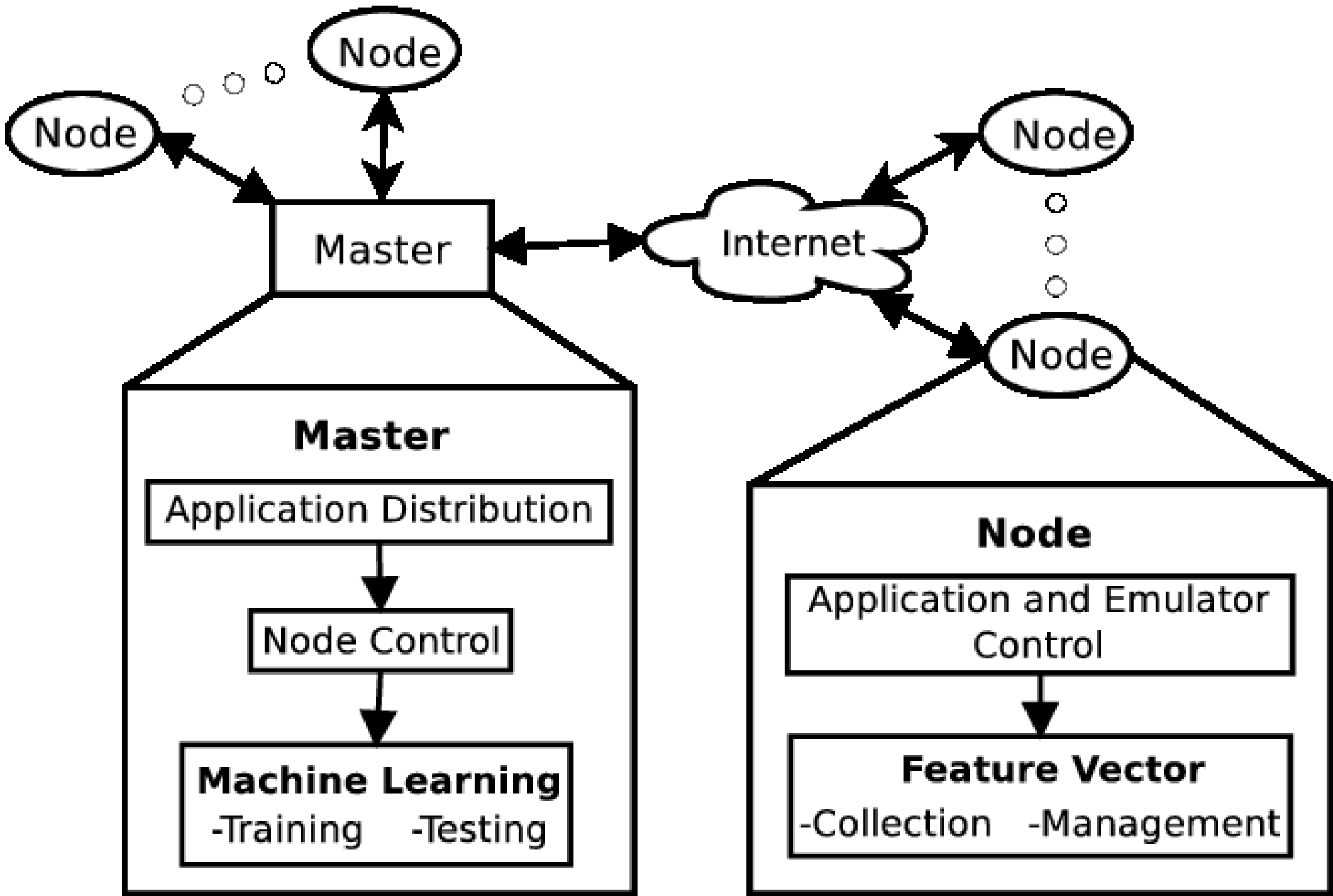


INTRODUCTION AND MOTIVATION: TODO

- A
- B
- C
- D
- E

CONTRIBUTION: TODO

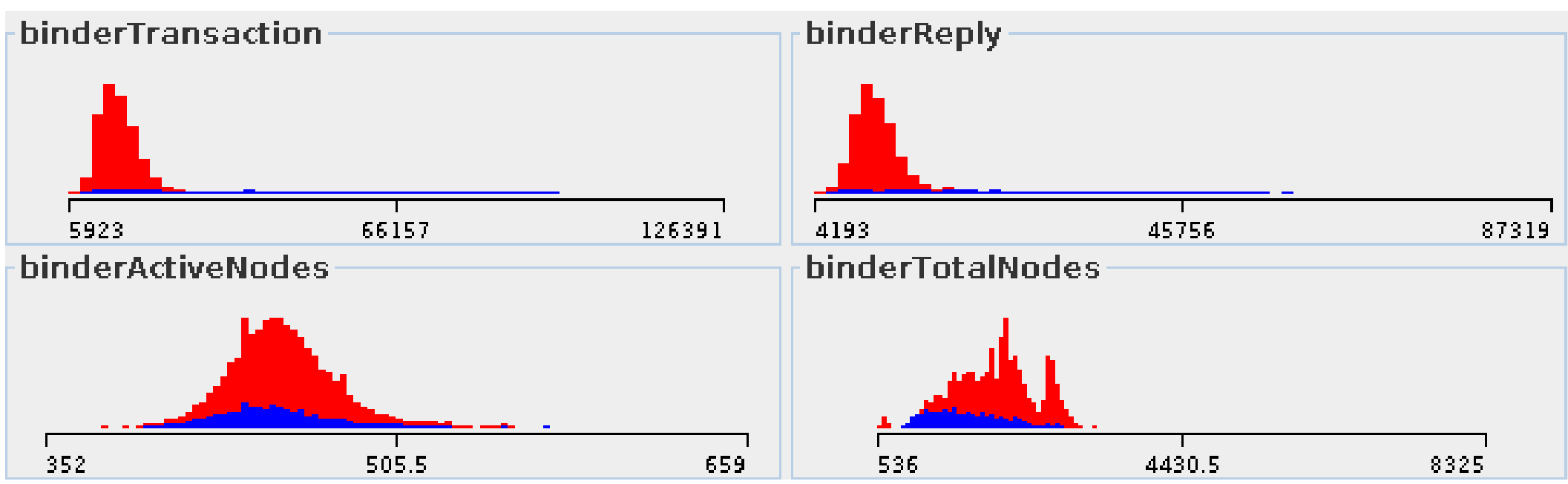


- A
 - A1
 - A2
 - A3
- B
- C
- D
- E

TODO *Algorithm*

```
1 applications.distributeToNodes
  for node ∈ nodes do
2   node.applications.distributeToDevices
   for application ∈ node.devices.applications
   do
3    a.install(application)
4    a.class ← s.detectClass
5    a.startDataCollection
6    a.initializeMonkey
   while monkey.isRunning do
7     a.collectFeatureVector
8   s.featureVector ← a.featureVector
9 nodes.collectFeatureVectors
10 classifiers.trainAndEvaluate
   • A
   • B
   • C
```

TODO *Visualization*



- A
- B
- C

Results TODO

| Classifier | Cross Validation | | | Testing Set | | |
|-----------------------|----------------------|--------|--------|----------------------|--------|--------|
| | Correctly Classified | TPR | FPR | Correctly Classified | TPR | FPR |
| Random Forest | 94.53% | 97.66% | 14.85% | 70.31% | 66.67% | 26.90% |
| Naive Bayes | 79.79% | 87.85% | 44.36% | 78.91% | 95.50% | 33.79% |
| Multilayer Perceptron | 93.91% | 97.27% | 16.13% | 70.31% | 61.26% | 22.76% |
| Bayes net | 86.23% | 93.95% | 36.88% | 81.25% | 97.30% | 31.03% |
| Logistic | 89.52% | 97.07% | 33.08% | 68.75% | 48.65% | 15.86% |
| J48 | 93.43% | 96.09% | 14.55% | 73.44% | 72.97% | 26.21% |

- A
- B
- C

- D
- E

TODO

- A
- B
- C
- D
- E

TODO

- A
- B
- C
- D
- E