Evaluating Models for Anomaly Detection in DDoS Attacks
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DS 4002: Data Science Project Course, 03/18/25

Data Appendix

EC2 CPU Utilization Data: each observation in this dataset represents the percentage of CPU resources used by an Amazon Elastic Compute Cloud (EC2) instance at a given point in time.
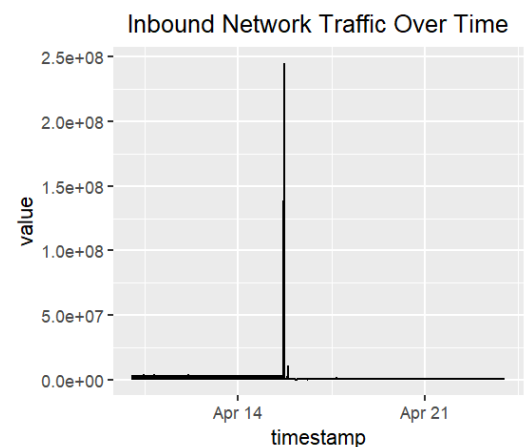Variables:
- timestamp: the specific point in time when the CPU utilization was recorded.
  - No missing observations
  - Start: 2014-02-14 14:30:00
  - End: 2014-02-28 14:25:00
  - Interval: 5 minutes
- value: the percentage of CPU resources used by the EC2 instance at the recorded timestamp.
  - No missing observations
  - Minimum: 0.0660
  - 1st Quartile: 0.1320
  - Median: 0.1340
  - Mean: 0.1263
  - 3rd Quartile: 0.1340
  - Maximum: 2.3440
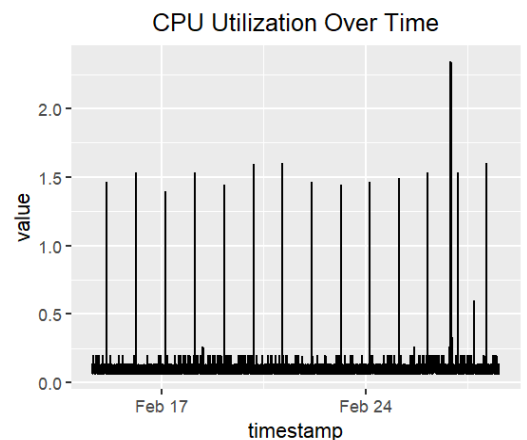
EC2 Network In Data: Each observation in this dataset represents the amount of inbound network traffic, measured in bytes, received by an Amazon Elastic Compute Cloud (EC2) instance at a given point in time.
Variables:
- timestamp: the specific point in time when the inbound network traffic was recorded.
  - No missing observations
  - Start: 2014-04-10 00:04:00
  - End: 2014-04-24 00:09:00
  - Interval: 5 minutes
- value: the total amount of data, in bytes, received by the EC2 instance at the recorded timestamp.
  - No missing observations
  - Minimum: 38517
  - 1st Quartile: 219342
  - Median: 234246
  - Mean: 570810
  - 3rd Quartile: 251775
  - Maximum: 245126000

ELB Request Count Data: Each observation in this dataset represents the number of incoming requests processed by an Elastic Load Balancer (ELB) at a given point in time.

Variables:

- timestamp: the specific point in time when the number of requests was recorded.
  - No missing observations
  - Start: 2014-04-10 00:04:00
  - End: 2014-04-24 00:39:00
  - Interval: 5 minutes
- value: the total number of requests received by the ELB at the recorded timestamp.
  - No missing observations
  - Minimum: 1.00
  - 1st Quartile: 15.00
  - Median: 48.00
  - Mean: 61.84
  - 3rd Quartile: 89.00
  - Maximum: 656.00

Request Count Over Time