

XStream-Dynamic Temporary

1 Dynamic Evaluation

| Window size ϕ | HST | | LODA | | XS | | XS-1000 | |
|-----------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
| | MAP | OAP | MAP | OAP | MAP | OAP | MAP | OAP |
| 1% | 0.480 ± 0.178 | 0.416 | 0.090 ± 0.028 | 0.076 | 0.505 ± 0.138 | 0.422 | 0.522 ± 0.153 | 0.430 |
| 5% | 0.492 ± 0.179 | 0.416 | 0.082 ± 0.014 | 0.077 | 0.455 ± 0.135 | 0.406 | 0.493 ± 0.134 | 0.415 |
| 10% | 0.430 ± 0.024 | 0.419 | 0.081 ± 0.010 | 0.080 | 0.444 ± 0.037 | 0.433 | 0.448 ± 0.037 | 0.436 |
| 25% | 0.363 ± 0.024 | 0.359 | 0.080 ± 0.001 | 0.080 | 0.409 ± 0.009 | 0.404 | 0.435 ± 0.013 | 0.429 |

Table 1: Mean average precision (MAP) and overall average precision (OAP) on spam-sms. Window-sizes as a percentage of the entire dataset.

| Window size ϕ | HST | | LODA | | XS | | XS-1000 | |
|-----------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
| | MAP | OAP | MAP | OAP | MAP | OAP | MAP | OAP |
| 1 day | 0.331 ± 0.055 | 0.330 | 0.329 ± 0.059 | 0.331 | 0.436 ± 0.083 | 0.437 | 0.451 ± 0.106 | 0.452 |
| 3 days | 0.339 ± 0.058 | 0.329 | 0.324 ± 0.061 | 0.345 | 0.478 ± 0.078 | 0.479 | 0.508 ± 0.064 | 0.509 |
| 5 days | 0.336 ± 0.059 | 0.329 | 0.325 ± 0.049 | 0.323 | 0.472 ± 0.050 | 0.472 | 0.493 ± 0.055 | 0.496 |
| 7 days ^{1,2} | – | – | — | — | 0.497 ± 0.053 | 0.502 | 0.533 ± 0.049 | 0.530 |

Table 2: Mean average precision (MAP) and overall average precision (OAP) on ur1. Window sizes as days of incoming URLs, received at 20,000 URLs per-day.

¹ HST exceeds the available memory on a 1 TB machine.

² LODA did not complete running after x days.