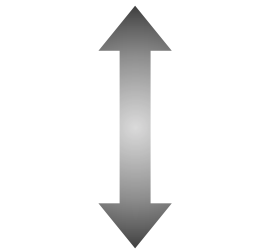## Policy layer

Right to be forgotten

Right to delete

[GDPR, CCPA, VCPDA]

Requirements layer

Rolling deletion

Delete my data that are older than a year

On-demand deletion

Delete all my data within the next 45 days

[Sarkar and Athanassoulis, EDBT '22]
[Shastri *et al.*, HotCloud '19]
[Shastri *et al.*, Comm. ACM '21]

Application layer

```
CREATE TABLE R (column1 type1,
    column2 type2, ...)
WITH RET_DUR FIXED {t1 45, t2 60};

INSERT INTO S (val1, val2, ...)
    WITH RET_DUR t2;

CREATE TABLE T (column1 type1,
    column2 type2, ...)
WITH DPT FIXED {d1 180, d2 365};

DELETE FROM T
    WHERE column1 = val1
        WITH DPT d1;
```
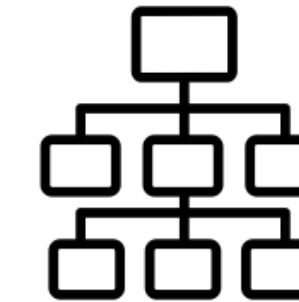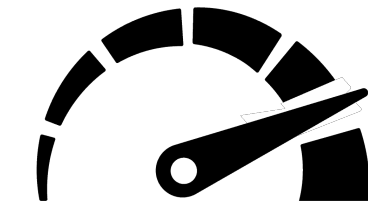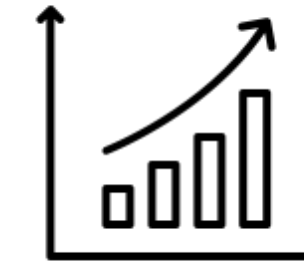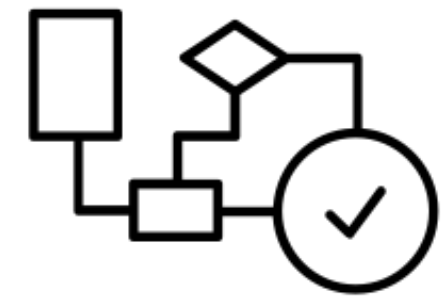
[Sarkar and Athanassoulis, EDBT '22]

System layer

workload *performance* *privacy*

Data layout

Re-organization algorithms

[Sarkar *et al.*, SIGMOD '20]
[Cohn-Gordon *et al.*, USENIX Security Symp. '20]