## 1. DATA INGEST AND EGRESS

1.1 *Multi-structured data*

1.2 *NoSQL data*

1.3 *Structured and Semi-structured data*

1.4 *JSON data*

## 2. DATA PROFILING

2.1 *Data type inference*

2.2 *Statistical profiling*

2.3 *Pattern-matching*

2.4 *String profiling*

2.5 *Unstructured text profiling*

## 3. DATA VALIDATION AND CLEANSING

3.1 *Constraint validation*

3.2 *Regex validation*

3.3 *Corrupt data validation*

3.4 *Unstructured data validation*

## 4. DATA TRANSFORMATION

4.1 *Structured to Hierarchical*

4.2 *Data normalization*

4.3 *Data integration*

4.4 *Aggregation*

4.5 *Data generalization*

## 5. DATA REDUCTION

5.1 *Dimensionality reduction*

5.2 *Numerosity reduction*