User-specified Input

Source Observations

Source	Object ID	Value
A1	GIGYF2, Parkinson	False
A1	GBA, Parkinson	True
A2	GIGYF2, Parkinson	True
A3	GIGYF2, Parkinson	False
A3	GBA, Parkinson	True

Domain Features

Source	Feature
A1	PubYear=2009
A1	Citations=34
A2	PubYear=2008
A2	Citations=128
A3	Study=GWAS

Ground Truth

Object ID	Value
GBA, Parkinson	True

SLIMFast Framework

1. Compilation
Convert input to probabilistic model

2. Optimizer
Analyze ground truth, observations, and select between EM & ERM for learning

3. Data Fusion

Learning

Inference

Output

Truth Discovery

ObjectID	Value
GIGYF2, Parkinson	False
GBA, Parkinson	True

Source Accuracy

Source	Feature
A1	0.94
A2	0.71
A3	0.85

Source Accuracy Analysis