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(57) Abstract :

An automated data classification system using semantic learning comprises a source intake interface (101), a preprocessing engine (102), a semantic encoder (103), a contextual feature aggregator (104), a classification core (105), a confidence evaluator (106), a policy mapper (107), a feedback manager (108), and an audit repository (109). Digital data objects from distributed repositories are normalized, semantically encoded, and jointly evaluated with contextual descriptors to assign classification labels. Confidence based routing enables automatic governance action, reviewer validation, or deferred handling, while corrective feedback supports adaptive refinement and traceable enterprise information control.

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