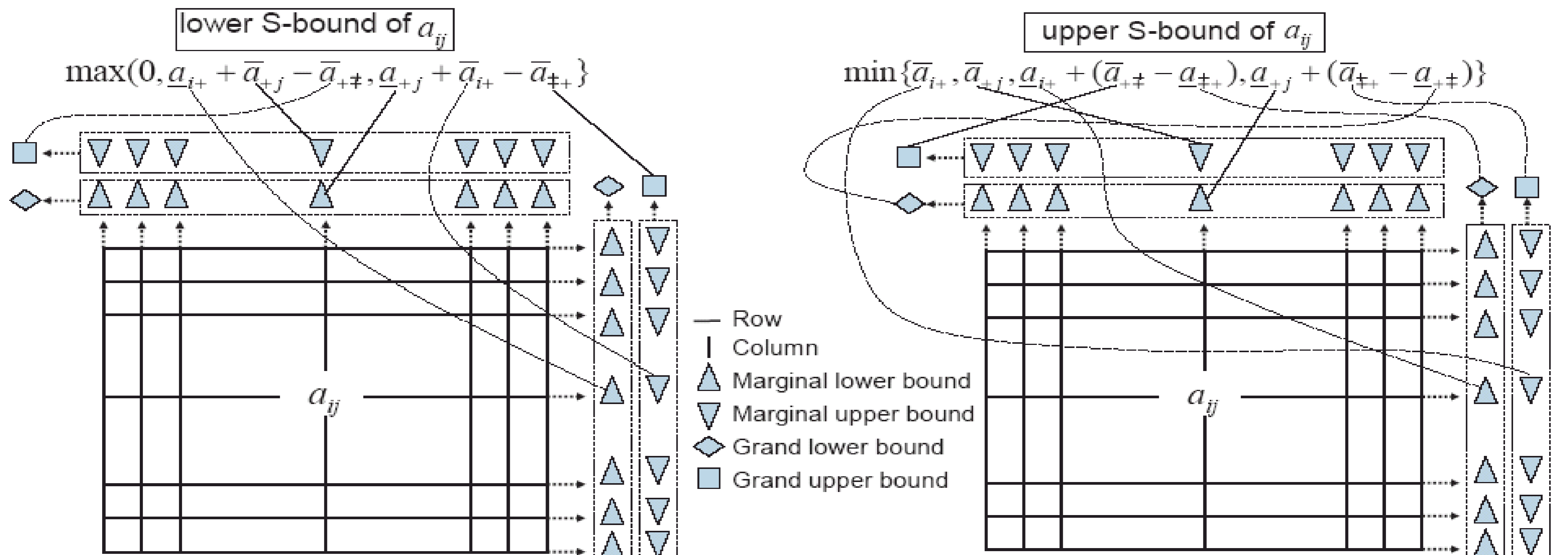


ILLUSTRATION OF BOUNDS DERIVED FROM BOUNDS



CENTRAL CONCERNS & QUESTIONS

The major concern in analyzing a large collection of user data is to preserve each user's privacy in individual data items while enabling data analytics to be performed at aggregation level.

EMERGING IDEAS & INITIATIVES

The basic idea to address the privacy concern in data analytics is to block direct access to privacy-disclosing data items and control indirect access to such items (i.e., inference channels) while minimizing the impact on the scope and accuracy of data analytics.

RESEARCH HIGHLIGHTS

- A set of formulae is provided for deriving the bounds of protected values in data tables from available marginal ranges.
- The concept of interval based inference is proposed, together with the algorithms to control such inference in query process.
- New architecture and protocol are designed to resolve the bottleneck of traditional inference control by distributing inference control from server side to user side.

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