
Literature Review

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1 Dynamic Graph Processing

Problems of processing dynamic graph with its continuous updates in real-time manner

- Graph storage: Modification of graph structure is costly
- Fast response: Widely used global manner cannot achieve real-time processing
- Workload imbalance: Some vertices update more frequently and consume more computing resource in a certain period of time.

Ideas:

- Random-access graph structure: Hash-based graph partition strategy to enable fine-grained graph updates
- Incremental graph processing: Vertex-based incremental graph computing model
- Workload rebalance: Detect hotspots and evaluate their workload, and then rebalance them with greedy algorithms.