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Dear Dr. Minho Jo (Editor-in-Chief):

An earlier version of this submission appeared as a short paper in the Proceedings of the 21st ACM International Conference on Information and Knowledge Management (CIKM). This version that I now submit to KSII Transactions on Internet and Information Systems (TIIS) includes the following substantial extensions that are definitely greater than 30%.

- Expanded algorithms: we present a substantial expansion of the pre-processing, initial and optimized phase algorithms shortened in the earlier version. Moreover, this submission includes several additional algorithms in the following:
  - Splitting overlapping ranges in [Alg. 2](#) on page 8,
  - Checking the pre-defined field count limit on the split ranges on page 8,
  - Computing scan cost in [Alg. 3](#) on page 10, and
  - Computing query cost in [Alg. 5](#) on page 13.
- Complexity analysis: we conduct the asymptotic running time analysis on the proposed algorithms in Section 3 on pages 14–15.
- Experiments: we provide additional runtime statistics measured from our experiments, as exhibited in [Table 1](#) on page 16. In addition, we compare the recommendation quality of our tool with those of a human expert and a vanilla approach (no partitioning), as shown in [Fig. 5](#) on page 17.
- More thorough literature review: Section 5 on page 18 discusses in greater detail the similarities and differences between existing works and our work.

Sincerely yours,

Young-Kyoon Suh