

Letter from the Editor-in-Chief

The June issue of the Data Engineering Bulletin features an opinion piece by Carlo Zaniolo et al, a collection of papers on the topic of knowledge management for e-commerce, and letters from the 2021 IEEE TCDE Award winners.

It feels nostalgic to read the opinion piece written by Carlo Zaniolo et al on the topic of stable semantics and aggregates. It continues to amaze me that aggregates combined with recursion can be so powerful and at the same time so elegant. The immediate contribution of the paper is to unify the semantics of programs with different aggregates, and thus significantly simplify the verification of their stable model semantics. But the paper is really a culmination of a long history of research focusing on how to express very powerful algorithms using declarative programs and the root of the research dates back to a few seminal works by Zaniolo decades ago, including the work on the Logic Database Language (LDL).

The subject of this special issue is knowledge management for e-commerce, curated by associate editors Bing Yin and Sreyashi Nag, who work on e-commerce search at Amazon. Despite e-commerce's huge growth in the last decades and the massive technology investment behind online shopping, the field is still in its early stage when it comes to creating an amazing customer experience. The challenge is that a great customer experience must be founded on a clear understanding of customers' needs and the products that can potentially fulfill the needs. It has become clear that knowledge management – from customer profiling to product knowledge graph curation – lies at the core of this effort.

We would like to congratulate Divesh Srivastava and Arun Kumar for winning the 2021 IEEE TCDE Award. Srivastava is the recipient of the Impact Award for his contributions to many areas of data management in the last three decades, including deductive databases, streaming algorithms, and data integration, etc. Kumar is the recipient of the Rising Star Award for his vision and pioneering work on DB+ML systems. In their letters, they shared their unique perspectives on the past and the future of data management.

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