Letter from the Editor-in-Chief

Delayed Publication

This December, 2015 issue of the Bulletin is, as some of you may notice, being published in July of 2016, after the March and June, 2016 issues have been published. Put simply, the issue is late, and the March and June issues were published in their correct time slots. The formatting of the issue, and the surrounding editorial material, e.g. the inside front cover and copyright notice, are set to the December, 2015 timeframe. Indeed, the only mention of this inverted ording of issues is in this paragraph. Things do not always go as planned. However, I am delighted that the current issue is being published, and I have high confidence that you will enjoy reading about next-generation stream processing, the topic of the issue.

The Current Issue

At one point a few years ago, the research community had lost interest in stream processing. The first streaming systems had been built and these early systems demonstrated their feasibility. Commercial interest had been generated, with a number of start-ups and major vendors entering the market. Even using a declarative database-style query language had become an accepted part of the technology landscape. Job done, right? Actually, wrong!

As we have seen with the database field itself, innovation and a changing technological environment can lead to an "encore" of interest in a field. Such is the case with stream processing. The issue title: "Next-Generation Stream Processing" captures that. The issue itself captures a whole lot more about the state of the field. Streaming systems have evolved, sometimes in revolutionary ways. Applications of streaming technology have exploded, both in number and in importance. As much as at any time in the past, the streams area is a hive of activity. New technology is opening new application areas, while new application areas create a pull for new technology.

David Maier has worked with Badrish Chandramouli to assemble this current issue devoted to presenting the diversity of work now in progress in the streaming area. Streaming technology is at the core of much of their recent research. This makes them ideal editors for the current issue. They have brought together papers that not only provide insights into new streaming technology, but also illustrate where technology might be taking us in its enabling of new applications. Streams are here as a permanent part of the technology environment in a way similar to databases. Thanks to both David and Badrish for bringing this issue together on a topic that will, I am convinced, become a fixture of both the research and the application environment of our field.

David Lomet Microsoft Corporation