

Question Streaming Data Analytics

Andrea Bonifacio

February 2, 2023

1 Which are the three approaches to tame velocity? Compare and contrast two of them.

- Data Stream Management Systems (DSMS): work with data streams, like unbounded sequences of time-varying data elements, similar to a continuous flow of information. These data are then analyzed with queries over streams that are observed through windows. It has an absolute notion of time, and recency matters.
- Complex Event Processing.
- Event-Based Systems: systems that emit and consume events, which are immutable entities that represent the smallest possible piece of information that gets managed by the system. The event gets consumed by the system asynchronously, decoupling the emission and consumption process.

2 Which are the three time-models we introduced? List them all before comparing and contrasting two of them

The three time models are

- Stream only time model.
- Absolute time model.
- Interval based time model.

In a stream only time model, the time is scanned by the arrival of data items