WHAT IS CLAIMED IS:

1. A method performed by a data processing system for processing data, the method including:

receiving, by a data processing system, a data record keyed to a unique identifier;

searching a data store for a historical aggregation of data keyed to the unique identifier, with the historical aggregation being a pre-computed data aggregation from a time that is prior to receiving the data record;

computing combined data that is keyed to the unique identifier, based on the data record keyed to the unique identifier and on the historical aggregation keyed to the unique identifier; and

modifying the data record keyed to the unique identifier by inserting the combined data keyed to the unique identifier into a field of the data record.

2. The method of claim 1, further including:

attaching, to the data record, customer profile data for a customer associated with a particular event included in the data record; and

attaching to the data record an appendable lookup file (ALF) with a historical aggregation for the particular event.

3. The method of claim 1, wherein computing the combined data includes:

adding incremental data to the historical aggregation, with the incremental data including data from a time at which the historical aggregation was computed to a near present time that is within a minute of the present time; and

producing, based on the adding of the incremental data, a near real-time aggregation of the data.

4. The method of claim 1, wherein the data record includes an event.

5. The method of claim 1, wherein searching includes searching in a data repository or searching in-memory.

6. A data processing system for processing data including:

one or more processors; and

one or more machine-readable hardware storage devices storing instructions that are executable to cause the one or more processors to perform the steps of any one of claims 1 to 5.

7. One or more machine-readable hardware storage devices storing instructions that are executable to cause the one or more processors to perform the steps of any one of claims 1 to 5.