

# Aggregation

- Aggregation operations process data records and return computed results.
- Aggregation operations group values from multiple documents together, and can perform a variety of operations on the grouped data to return a single result.
- MongoDB provides three ways to perform aggregation:
  - the aggregation pipeline
  - the map-reduce function
  - single purpose aggregation methods.

# Single Purpose Aggregations

- Across a single collection
  - `db.collection.count()`
    - e.g. `tweets.find({"$geo" : {"$ne" : None}}).count()`
  - `db.collection.distinct()`

# The Aggregation Pipeline

- Filter Documents
- Apply a Transformation