



@ Real Estate Analytics

Yi Sam Lee
Data Lead @ Real Estate Analytics (REA)



About REA

Slicing & Dicing

**Extraction & Parsing** 

#### **ABOUT REA**



#### **REAL ESTATE ANALYTICS (REA)**

#### The Leading Real Estate Al Provider in Asia

At Real Estate Analytics (REA), we revolutionise the real estate industry with cutting-edge AI technology. Leveraging advanced data science and machine learning, we offer tailored data solutions for real estate professionals and enthusiasts.





Founded in Singapore in 2019 by Dr. Jean-Michel Paul, Patrick Yan, Jiajia Yao. Chairman Pr. R Edelstein







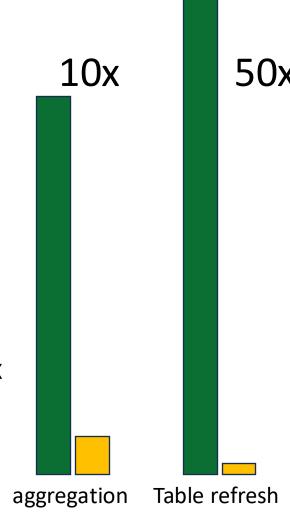
HQ in Singapore, active in Australia, Hong Kong, and Malaysia



# Slicing and Dicing - Aggregation & point search

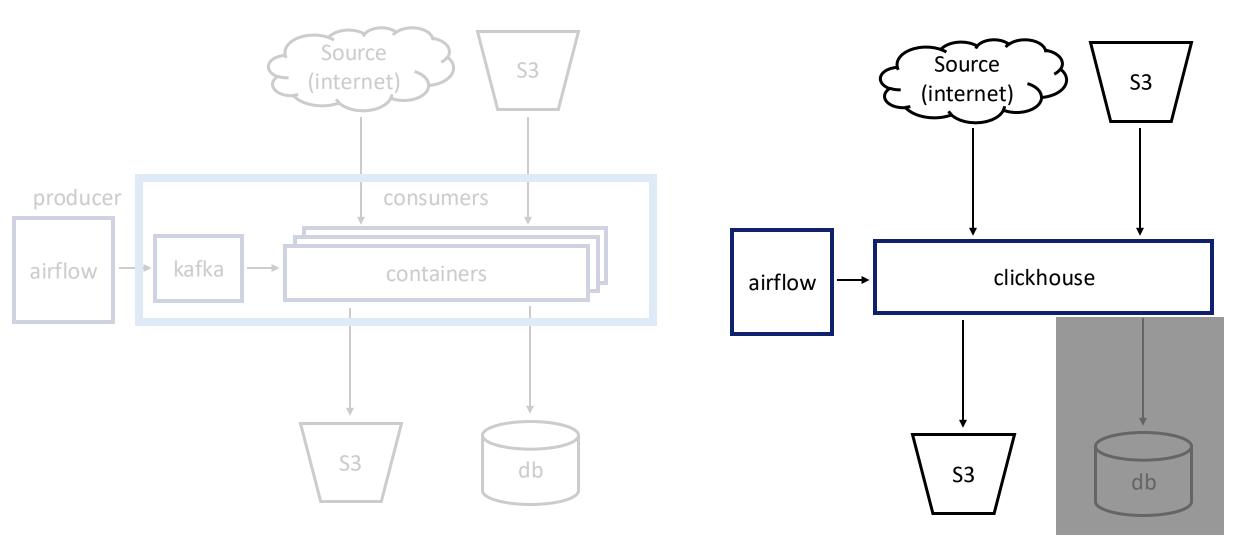


- For data size in the range of 3 20 mil rows (> 200 columns)
- Mongodb vs Clickhouse
  - Aggregation
    - about 10x faster in clickhouse
  - Point search
    - Comparable speed for comparable resource with index
    - Speed for table refresh is significantly faster in clickhouse
      - <30s
      - 25-30min (1500-1800s)
    - Mongodb -> 10% additional time for each additional index



## **Extraction and Parsing**





Why not use clickhouse

### **Extraction and Parsing**



- Globs / path functions
  - 1...10
  - \* / \*\*
  - zip file reading
- Insert into function s3
  - Save file to s3
  - partition by
- Parsing functions
  - extract / extractAll
  - JSON\_QUERY...

## **Extraction and Parsing**



- Demo
  - data.gov.sg <u>link</u>
  - Property website <u>link</u>
  - Medical centre website <u>link</u>

### Some issues we currently face



• Date starts from 1970 (date) or 1900 (datetime64)

No wkt format for geometry for display in dbeaver

No auto generated sequence