

StarGazer:

Map Analytics in StarCraft II

Guang Yang









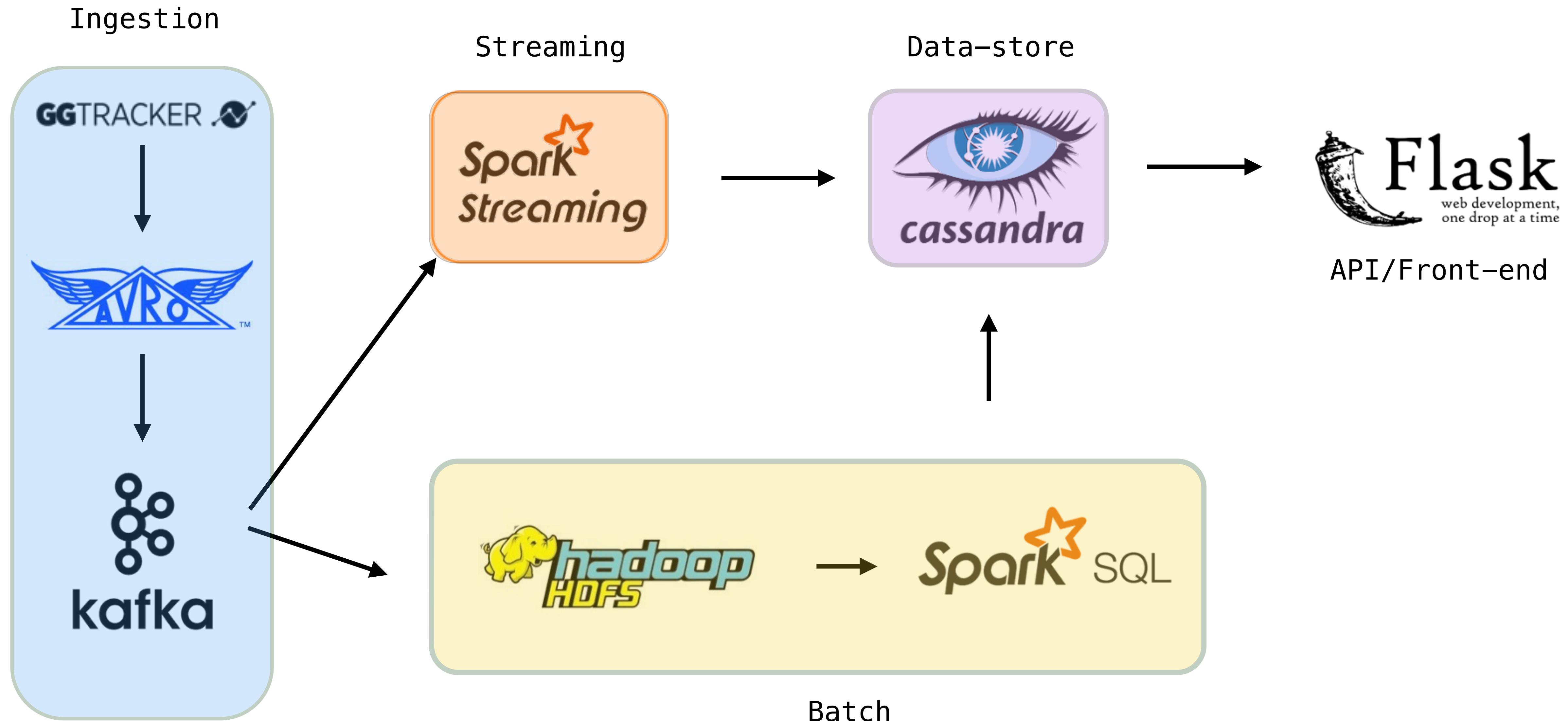




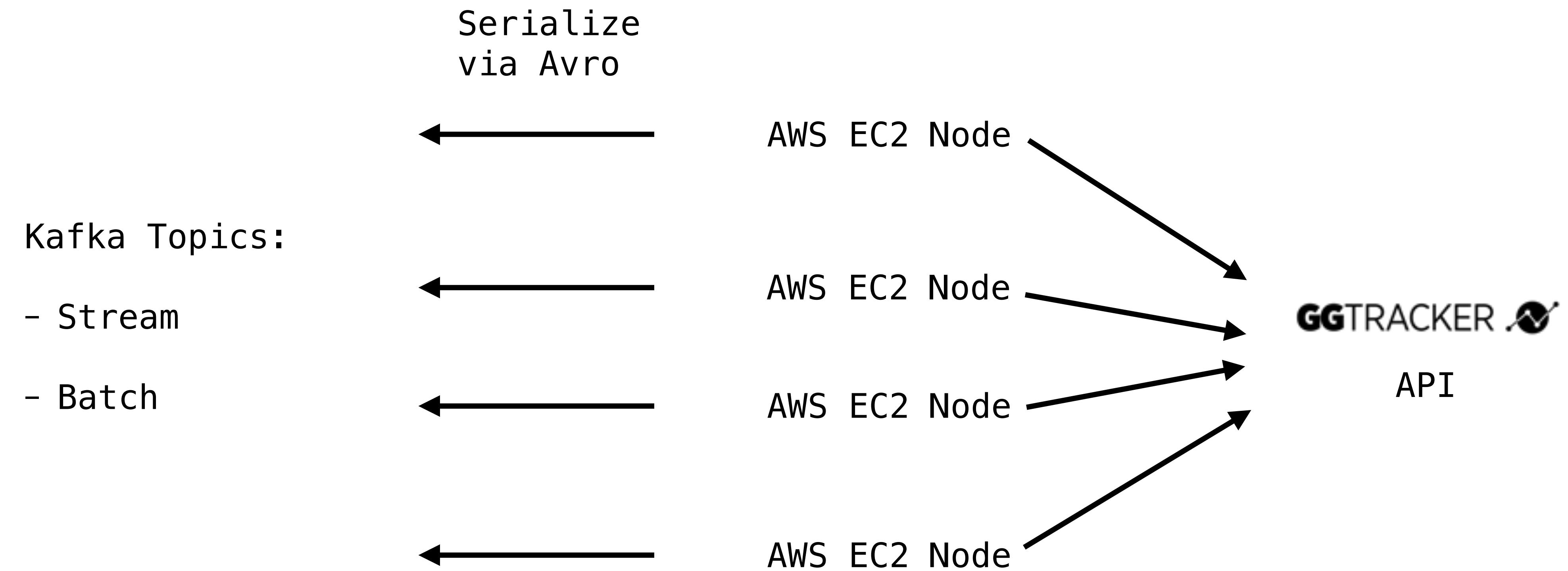


(Demo)

Pipeline



Ingestion



Example API Request: <http://api.ggtracker.com/api/v1/matches/3529593.json>

```

1 {  

2   "id": 5737334,  

3   "ended_at": "2015-01-15T20:46:59+00:00",  

4   "winning_team": 1,  

5   "category": "Ladder",  

6   "game_type": "1v1",  

7   "average_league": 3,  

8   "duration_seconds": 1294,  

9   "release_string": "2.1.8.33553",  

10  "replays_count": 1,  

11  "summaries_count": 0,  

12  "expansion": 1,  

13  "cobrand": null,  

14  "map_name": "Overgrowth LE",  

15  "map": {  

16    "id": 5440,  

17    "name": "Overgrowth LE",  

18    "gateway": "us",  

19    "s2ma_hash": "b4e4d3994ee12ce0212c6703950eed3a61b61",  

20    "image_scale": 0.6944444444444444  

21 },  

22  "map_url": "https://gg2-mi-dev.s3.amazonaws.com/overg",  

23  "entities": [  

24    {  

25      "id": 16630314,  

26      "wpm": null,  

27      "apm": 106.831530139104,  

28      "spending_skill": 6.017045858077446,  

29      "win": true,  

30      "race": "P",  

31      "team": 1,  

32      "color": "B4141E",  

33      "race_macro": 0.859864838650011,  

34      "sat_1_skill": 5.0,  

35      "sat_2_skill": 5.0,  

36      "sat_3_skill": 0.0,  

37      "saturation_skill": 0.0,  

38      "max_creep_spread": null,  

39      "action_latency_real_seconds": 0.623904017742019,  

40      "identity": {  

41        "id": 1106688,  

42        "type": "ESDB::Sc2::Identity",  

43        "name": "Tortuga",  

44        "provider_id": null,  


```

Serialization via Avro



- reinforces schema
- splittable on HDFS
- backward compatible
- saves space (binary)

```

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"float", "null"], "name": "player0_wpm_career"}, {"type": |  

"null"], "name": "player0_most_played_race"}, {"type": "flo  

"player0_hours_played"}, {"type": ["boolean", "null"], "nam  

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"float", "name": "player0_avg_unspent_resources"}, {"type": :  

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{"type": "string", "name": "player1_name"}, {"type": ["int"  

"name": "player1_current_league_1v1"}, {"type": ["int", "nu  

"name": "player1_current_rank_1v1"}, {"type": ["int", "null  

"player1_matches_count"}, {"type": ["int", "null"], "name":  

"player1_season_games"}, {"type": ["int", "null"], "name":  

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"float", "null"], "name": "player1_wpm_career"}, {"type": |  

"null"], "name": "player1_most_played_race"}, {"type": "flo  

"player1_hours_played"}, {"type": ["boolean", "null"], "nam  

"player1_win"}, {"type": "string", "name": "player1_race"},  

"float", "name": "player1_avg_unspent_resources"}], "type": :  

"name": "simple_match"}DC4avro.codecBSnullNULP@iHÂj  

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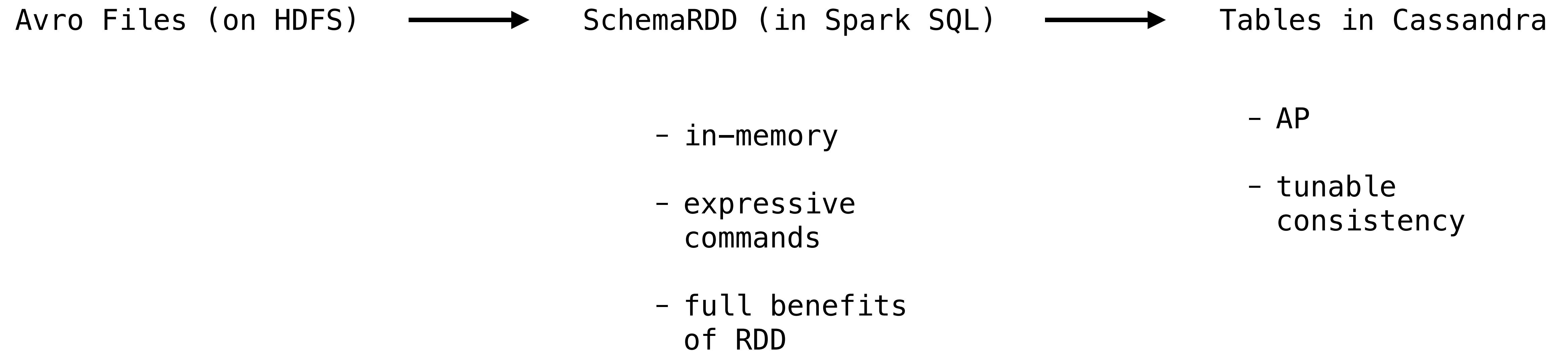
net/sc2/zh/nprofile/1261502/1/iGiA/"!1CNIII~!1CSTXSTXr>

```

2

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Batch



Streaming

Guang Yang

- B.A. in Computational and Applied Mathematics (Rice University)
- M.S. in Industrial Engineering & Operations Research (UC Berkeley)
- Got into Diamond League as Terran without making any Tanks
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